



Environment

Pursue cutting-edge environmental initiatives to realize a sustainable society through our business activities

Objectives

- We will efficiently utilize energy, water and raw materials and reduce greenhouses gases in our business activities.
- We will strive to create a smart community with efficient transportation and distribution systems as well as electricity and water use.
- We will expand the use of renewable energy in buildings and residences.
- We will proactively provide buildings and residences certified as being environmentally and socially responsible.

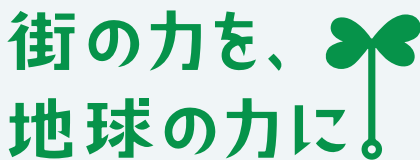
Key performance indicators

- KPI 9** Energy use/CO₂ emissions
- KPI 10** Waste generated/water used
- KPI 11** Number of projects recognized with CASBEE (new construction design)/Development Bank of Japan (DBJ) Green Building certifications
- KPI 12** Solar power output
- KPI 13** Area of green on roofs and walls
- KPI 14** Rate of annual adoption for energy conservation level 4
- KPI 15** Rate of annual adoption for *soleco* system
- KPI 16** Rate of adoption for high-efficiency appliances (hot water heaters/LED equipment/ultra-water-conserving toilets)
- KPI 17** Small- and medium-sized building renovations/condominium renovations
- KPI 18** Rate of use of Japan-grown timber

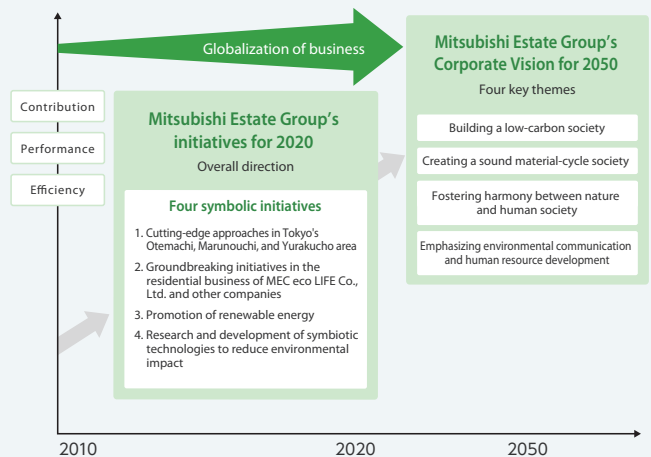
Long-Term Environmental Vision and four symbolic initiatives

Mitsubishi Estate Group Long-Term Environmental Vision

The Mitsubishi Estate Group has established the Mitsubishi Estate Group Long-Term Environmental Vision, based on the Mitsubishi Estate Group's Basic Policy on the Environment, to constructively address environmental issues going forward. This vision clearly lays out the Group's stance on actively contributing to society by reducing environmental impact.



The Mitsubishi Estate Group environmental logo features the slogan, "For Sustainable Cities, For the Sustainable Earth."



Mitsubishi Estate Group Basic Environmental Policy

The Mitsubishi Estate Group has established the Mitsubishi Estate Group Basic Environmental Policy, which is based on its corporate mission. The entire Group works together to implement sound environmental management.

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

Four symbolic initiatives

Initiatives in Tokyo's Otemachi, Marunouchi and Yurakucho area

Completion of Otemon Tower-JX Building, equipped with water purification facility for Imperial Palace moat

In November 2015, Mitsubishi Estate completed the Otemon Tower-JX Building, a 22-story high-rise developed jointly with JX Holdings, Inc. This building is particularly unique because it was the first private-sector project to introduce a rapid water purification facility and large-scale reservoirs, which are designed to improve the water quality in the Imperial Palace moat.

In recent years, the quality of the water in the Imperial Palace moat has deteriorated significantly as a result of algae blooms attributable to a chronic lack of fresh water. The purification facility installed in the basement of this building will take in water from the Imperial Palace moat and purify it at a fast speed of about 0.18m³ of water every five seconds (equivalent to the volume of water in a household bath). This amounts to about 500,000m³ annually. To prevent water from stagnating as a result of low water levels in the moat, a massive water reservoir (about 3,000m³, equivalent to about six 25m pools) was installed to release water into the moat. This initiative is intended to improve the water quality around Otemon Gate in particular, thereby helping to enhance the urban environment around the Outer Gardens of the Imperial Palace.

In addition, some floors are equipped with LED lighting systems with image sensors that automatically adjust illumination and color temperature, and radiant air conditioning and desks with individual heating and cooling units to maintain a calm and pleasant office environment with few temperature irregularities, all the while conserving energy. By adopting environmentally friendly exteriors and facilities, the Company expects to reduce CO₂ emissions per unit of floor space in the office area by about 36%. This is equivalent (at the implementation and design stage) to the S class under the Comprehensive Assessment System for Built Environment Efficiency (CASBEE).

In addition, the project makes the most of its proximity to the green areas of the Imperial Palace's Outer Gardens. The building, together with the adjacent Otemachi Park Building, which will be completed in November 2017, creates green space equivalent to about 45% of the buildings' external area, thus providing a relaxing area for workers. The Otemon Tower-JX Building epitomizes a cutting-edge office space that delivers both energy conservation and comfort.



Number of projects recognized with CASBEE (new construction design)/Development Bank of Japan (DBJ) Green Building certifications

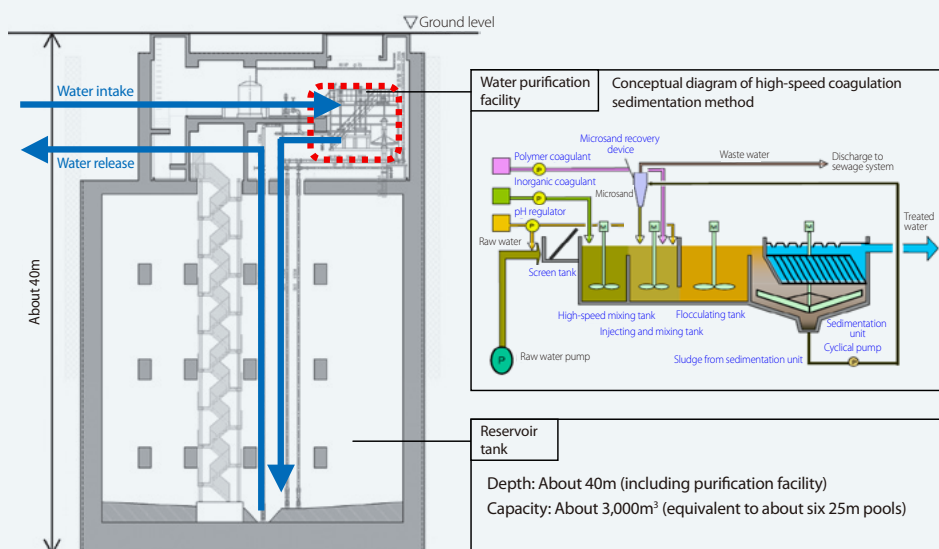
KPI
11

7/20 buildings and projects

Area of green on roofs and walls

KPI
13

About 35,210m²



Initiatives in the residential business

Experimental biodiversity initiatives at Setagaya House

To explore ways to conserve biodiversity and create more appealing outdoor areas for visitors at properties developed and operated by the Mitsubishi Estate Group, in 2015 Mitsubishi Estate renovated the outdoor area around Setagaya House, a condominium owned by Mitsubishi Estate, making it into an “experimental garden” to test various approaches. This earned the Company certification from the Association for Business Innovation in Harmony with Nature and Community (ABINC; condominium category).*

After transforming the inner courtyard into an environment that values biodiversity, Mitsubishi Estate has used this experimental garden to test various methods of maintaining and managing this kind of environment, while deepening residents’ understanding of biodiversity. These measures include maintenance and management, monitoring, and communication programs involving resident participation. The Company intends to use the experience gained through these initiatives in operation of its ABINC-certified properties after completion.



* A certification program started in 2013 for office buildings and commercial facilities which intends to make biodiversity initiatives in land use visible and easier to understand. In fiscal 2014, certification was extended to condominiums and factories.



Experimental garden

Promoting and popularizing renewable energy

Four Premium Outlets switch to renewable energy

The four Premium Outlets operated by Mitsubishi Estate-Simon Co., Ltd. (in Gotemba in Shizuoka Prefecture, Sano in Tochigi Prefecture, Ami in Ibaraki Prefecture and Shisui in Chiba Prefecture) switched to renewable energy using Renewable Energy Certificates for some of their energy consumption, starting in April 2016.

As a result, 8 million kWh, equivalent to 20% of the 40 million kWh in annual electricity consumption at the four complexes, is now covered by renewably energy. This is the largest such initiative for commercial facilities in Japan.

In addition, Mitsubishi Estate-Simon has introduced a carport-type solar power generator for captive consumption that produces an estimated 1.15 million kWh in power annually at its Ami Premium Outlet. The company will continue to focus on building energy-saving facilities to contribute to reductions in environmental impact.



Ami Premium Outlet's carport-type solar power generator for captive consumption

Solar power output

KPI 12 About 7,440kw/16 sites

Pursuing R&D into environmentally symbiotic technology

Opening of 3x3 Lab Future

In March 2016, 3x3 Lab Future, a new hub for business generation based on the key concepts of economy, society and the environment, opened on the first floor of the Otemon Tower-JX Building.

This facility, which is positioned as a “third type” venue that is neither home nor work, holds activities promoting interaction such as seminars and events and publicizes information on environmental initiatives to a broad audience. In addition, 3x3 Lab Future functions as an experimental laboratory in pushing forward the research that Mitsubishi Estate has carried out thus far on next-generation office spaces. The next-generation office used as an office by the Ecozeria Association, in which Mitsubishi Estate participates, has introduced office desks with individual heating and cooling units and chairs with sensors for health conditions for further testing and validation.

Mitsubishi Estate will continue to research various themes to help resolve the issues of the local community and broader society.



3x3 Lab Future Communication Zone

Reducing environmental impact

Diverse initiatives to improve environmental performance of condominiums

Mitsubishi Jisho Residence Co., Ltd. employs the Five Eyes process to ensure the quality of its residences, and Eco Eyes is one of the five. The company is taking various approaches to improving environmental performance.

1. Soleco power systems save electricity and money

Soleco is an environmental system that balances environmental friendliness with affordability by reducing electricity costs for condominium units and shared areas. This is achieved by combining high-voltage collective power systems with solar power systems in condominiums.



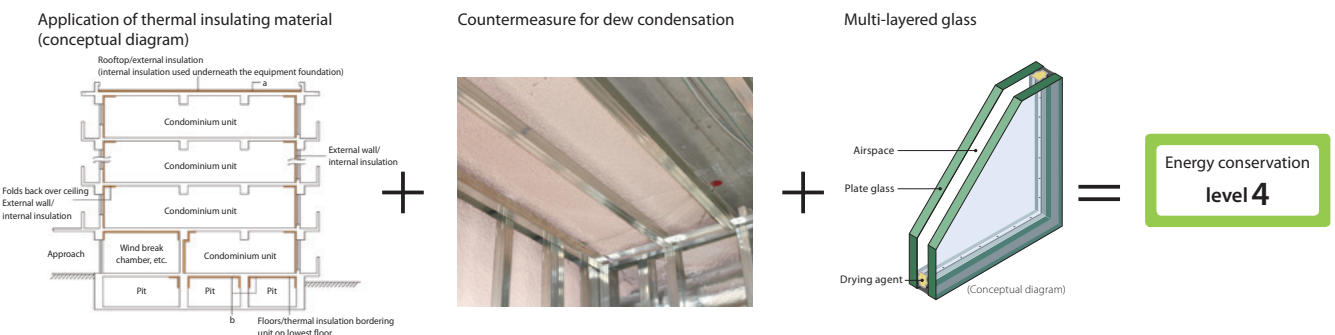
Rate of annual adoption for soleco system

KPI 15 **79%**

2. Various techniques enhance insulation effectiveness

We have incorporated a range of techniques to enhance insulation effectiveness, such as applying external and internal insulation, taking measures to prevent dew condensation and using multi-layered glass. The result was a residence product worthy of energy conservation level 4 in the next-generation energy conservation standards established by the Japanese government in 1999.

In line with the 2013 energy conservation standards for residences that went into full effect on April 1, 2015, we aim to earn insulation performance level 4 and primary energy consumption level 4 for all the residences for which we make application for building confirmation thereafter.



Rate of annual adoption for energy conservation level 4 (based on the next-generation energy conservation standards established by the government in 1999)

KPI 14 **93%**

3. Highly efficient devices save energy

In the condominiums sold by the company, high-efficiency equipment is adopted, such as shower heads that conserve hot water, faucets that conserve hot water, bathtubs that retain heat and toilets that conserve water. This contributes to the creation of a pleasant lifestyle that takes both the environment and economy into account.

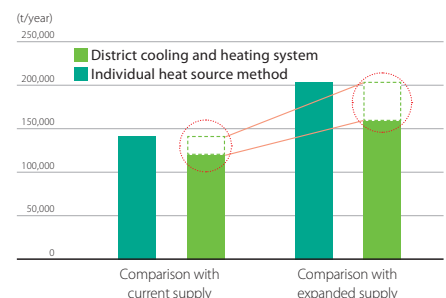
Rate of adoption for high-efficiency appliances (hot water heaters/LED equipment/ultra-water-conserving toilets)

KPI 16 **100/95/100%**

Reductions in heat discharge, the cause of the heat island phenomenon

Marunouchi Heat Supply Co., Ltd. operates large-scale district cooling and heating systems, an energy system that protects the urban environment. At the company's plants, heat for heating and cooling use is produced and managed collectively, and supplied to the Otemachi, Marunouchi and Yurakucho area. By using district cooling and heating systems, air pollution can be prevented and CO₂ emissions reduced compared to levels when each building is cooled and heated individually. In addition to saving energy, the system also reduces the amount of heat emitted to the atmosphere and thus helps mitigate the heat island phenomenon, a state in which the temperature in cities is higher than surrounding areas. Moreover, cities can be beautified once cooling towers and smoke stacks on top of buildings are no longer needed. We will continue to move ahead with initiatives to help conserve the environment.

Comparison of environmental effect of district cooling and heating system and individual heat source method



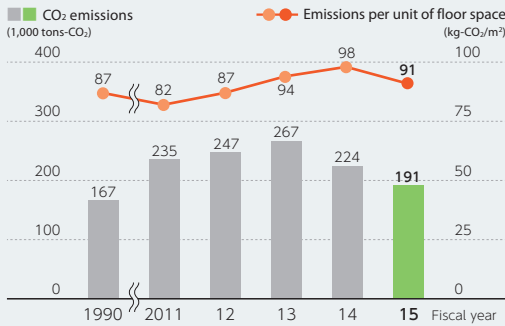
Currently, CO₂ reductions achieved with district cooling and heating systems are equivalent to about 3,100ha of forest. If this system is introduced to all companies in the area, the reductions would amount to about 4,200ha, and the reductions would improve by 35%.

Building a society with a lower carbon footprint

Initiatives to reduce CO₂ emissions in building operations and management and energy consumption

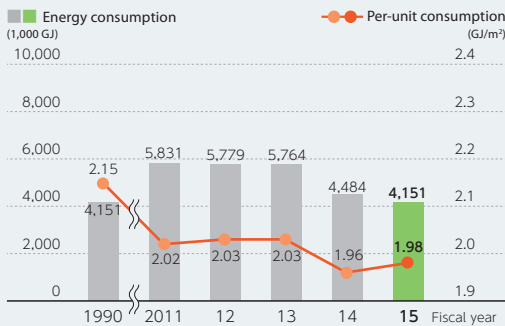
The CO₂ emissions and energy consumption of Mitsubishi Estate's 21 ISO14001-certified buildings* in fiscal 2015 are shown in the graphs below. Energy consumption per unit of floor space has been on the decline since the 2011 Great East Japan Earthquake as a result of repairs to facilities to raise energy conservation performance (such as replacing lights with LED lighting) and other energy-saving activities. In fiscal 2016, Mitsubishi Estate continues to work to reduce energy consumption in each building, targeting the stricter of either a 1.0% reduction compared to fiscal 2015 or the reduction mandated by the Tokyo Metropolitan Ordinance on Environmental Preservation.

CO₂ emissions and CO₂ emissions per unit of floor space from Mitsubishi Estate's ISO14001-certified buildings



* CO₂ emissions are calculated using the emissions coefficients determined for individual electrical power suppliers.
 * The number of buildings covered in fiscal 2015 (21) amounts to 47.2% of all buildings managed by Mitsubishi Estate.
 * The data for 1990 includes buildings prior to renovations (such as the former Marunouchi Building).

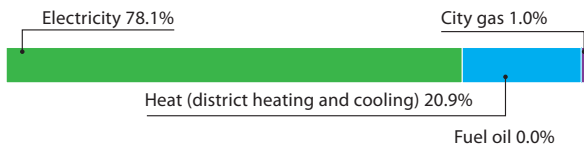
Energy consumption and energy consumption per unit of floor space in Mitsubishi Estate's ISO14001-certified buildings



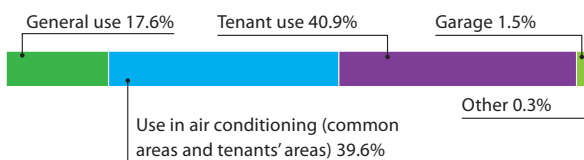
* The number of ISO-certified buildings changes each fiscal year due to renovations and sales/purchases.
 * The number of buildings covered in fiscal 2015 (21) amounts to 47.2% of all buildings managed by Mitsubishi Estate.

Collaborating with tenants to conserve energy

Fiscal 2015 energy consumption by use (for 21 ISO14001-certified buildings)



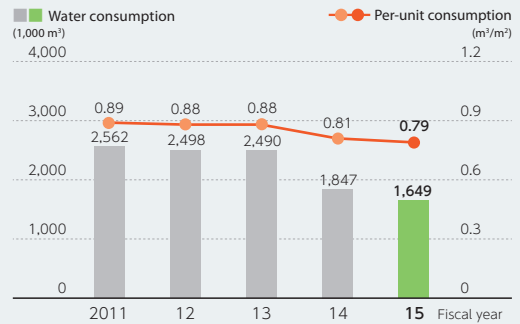
Fiscal 2015 energy consumption by application (for 21 ISO14001-certified buildings)



Helping society to recycle more

Effective consumption of water resources in buildings

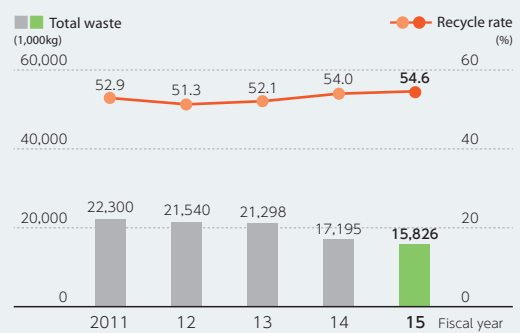
Water consumption and water consumption per unit of floor space in Mitsubishi Estate's ISO14001-certified buildings



* Number of buildings included in scope of data may differ by fiscal year due to renovations and sales/purchases.

Waste reduction and recycling initiatives in buildings

Total waste and recycle rates for Mitsubishi Estate's ISO-14001 certified buildings



* Number of buildings included in scope of data may differ by fiscal year due to renovations and sales/purchases.

Mitsubishi Estate Group's environmental data

Energy use and CO₂ emissions reported under Japan's Energy Conservation Law (fiscal 2015)

	Overall	Office buildings	Commercial facilities	Hotels	Other
Energy use (1,000 kl/year)	252	192	42	15	4
Unit consumption (kl/m ² per year)	0.035	0.036	0.046	0.066	0.006
CO ₂ emissions (1,000 t-CO ₂ /year)	478	358	84	27	9
Unit emissions (t/m ² per year)	0.067	0.067	0.094	0.122	0.013
Number of target facilities (buildings)	106	63	18	8	17
Floor area (1,000 m ²)	7,100	5,317	899	220	664

* Compiled for main buildings for which information on energy-saving measures is reported in compliance with the Energy Conservation Law (excluding small buildings with a floor area less than 1,000 m²).
 * This table is prepared on the basis of the information submitted by Group companies in compliance with the Energy Conservation Law, with some additions, and may differ from the actual figures submitted.

Energy use/CO₂ emissions

KPI 9 **252,000kl/478,000t a year**

Waste generated/water used

KPI 10 **42,728t/5,215,000m³ a year**

Completion of renovation of first condominium project in the Re-building Business

Since May 2014 Mitsubishi Jisho Residence Co., Ltd. has been involved in the Re-building Business, in which old small- and medium-sized buildings are renovated and rented.

Up until now the company has primarily worked on office buildings, but in January 2016 the Park Rex Toyocho, its first condominium renovation, was completed. With the theme of “homes that grow alongside children,” the building offers spaces in which parents and children can enjoy each other’s company, such as a “play lounge” with a hammock and ping pong table in the common area, a small communal vegetable garden, and an atelier for crafts with a workshop. In the individual units, one wall in the living and dining room is customizable, made of laminated boards made of larch so that shelves can be put up as the resident wishes. Also featured are sliding doors with a black-board surface that children can draw on. The project aims to meet the needs of the generation raising children by installing these features.

This Re-building Business aims to effectively use existing stock by taking an approach that is completely different than building demolition and new construction, which have a substantial environmental impact. In addition, the poor seismic resistance of older small- and medium-sized offices and condominiums can be improved by working with the building owner on seismic retrofits. This initiative earned the company the Good Design Award Best 100 in fiscal 2015.



Communal vegetable garden



Atelier for crafts



Play Lounge

Small- and medium-sized building renovations/
condominium renovations

KPI 17 → 10 buildings/300 units

Fostering harmony between nature and human society

Expanding the use of Japan-grown timber Project to Raise the Value of Japan-Grown Timber

Mitsubishi Estate Home Co., Ltd. proactively uses forest thinnings and small-diameter trees for its 2x4 structural materials, aiming to expand the use of Japan-grown timber in wood-frame homes overall. The percentage of Japan-grown timber used in structural materials by the company now exceeds 50%, which is one of the highest among builders of 2x4 homes in Japan.

Mitsubishi Estate Home is also effectively utilizing and expanding its use of timber grown in Yamanashi Prefecture as part of the Project to Raise the Value



Examples of use of domestic timber

of Japan-Grown Timber. The project works in affiliation with the “Experience Nature” Project, an activity that promotes interaction between urban and rural residents in Hokuto City in Yamanashi Prefecture.

Mitsubishi Estate Housing Components Co., Ltd. promotes the use of Japan-grown timber in structural materials for single-family homes, and in August 2010 the company obtained FSC-CoC certification, an international standard for distinguishing sustainably-grown timber from other timber during the processing and distribution stages.

FSC® logo mark issued by the Forest Stewardship Council® certifies that the wood or fibers used in the product were produced from forests managed properly in terms of the environment, society and the economy. The certification provides a guarantee that the forest of origin was assessed by an independent third-party organization based on principles and standards stipulated by the FSC.

Website: <http://www.fsc.org>

Rate of use of
Japan-grown timber

KPI 18 → Over 50%

BIO NET INITIATIVE, an effort by The Parkhouse to protect biodiversity, expanded to 50 properties nationwide

Mitsubishi Jisho Residence has expanded the BIO NET INITIATIVE, The Parkhouse’s biodiversity protection initiative launched in February 2015, to a total of 50 condominiums under The Parkhouse brand nationwide. The company plans the trees and plants for each property in a manner that will protect biodiversity, regardless of the property’s size and land area. This creates a green space that serves as a stopover for plants and animals by linking the surrounding green space with the street’s greenery. The company expects these condominiums to help to create an ecological network in their neighborhoods.

Following the certification of three buildings from the Association for Business Innovation in Harmony with Nature and Community (ABINC) in the condominium category, the company earned certification for a total of five buildings in fiscal 2015 in the condominium category, including The Parkhouse Takarazuka, the first in the Kansai area.

Mitsubishi Jisho Residence will continue to promote this initiative to protect biodiversity in all of the neighborhoods where The Parkhouse is located through the stable supply of these condominiums.



Biodiversity Action Award Japan 2015 “Let’s Select Award”