



ORIX

ORIX Group

# Environmental Report 2009-2010





# ORIX Group Outline

(As of March 31, 2009)

<b>Company Name</b>	ORIX Corporation	<b>Issued Shares</b>	92,217,067
<b>Location</b>	4-1-23 Shiba, Minato-ku, Tokyo, Japan	<b>Stock and Security Exchange Listings</b>	Tokyo Stock Exchange, First Section Osaka Securities Exchange, First Section (Securities Code: 8591) New York Stock Exchange (Trading Symbol: IX)
<b>Representatives</b>	Chairman and CEO: Yoshihiko Miyauchi President and COO: Yukio Yanase	<b>Main Business</b>	Diversified Financial Services
<b>End of Fiscal Year</b>	March 31	<b>Group Companies</b>	Consolidated: 814/ Affiliated: 115
<b>Shareholders' Equity</b>	¥1,167,530 million	<b>Network</b>	Japan: 1,110 locations Overseas: 298 locations (26 countries and regions)
<b>Employees</b>	18,920 (15,564 in Japan; 3,356 overseas)	<b>URL</b>	<a href="http://www.orix.co.jp">http://www.orix.co.jp</a>

## ● ORIX Group's Businesses (As of March 31, 2009)

Business segments	Main Business	Main Group companies	Asset composition
<b>Corporate Financial Services</b>	Lending, leasing, commission business for the sale of financial products, and environment-related business	<ul style="list-style-type: none"> <li>● ORIX</li> <li>● ORIX Alpha</li> <li>● ORIX Eco Services</li> <li>● NS Lease</li> <li>● ORIX Resource Recycling Services</li> <li>● ORIX Kitakanto</li> </ul>	22%
<b>Maintenance Leasing</b>	Automobile leasing and rentals, car-sharing, and precision measuring equipment and IT-related equipment rental and leasing	<ul style="list-style-type: none"> <li>● ORIX Auto</li> <li>● ORIX Rentec</li> </ul>	9%
<b>Real Estate</b>	Development and rentals of commercial real estate, condominium development and sales, hotel, golf course, and training facility operation, senior housing development and management, REIT asset management and real estate investment advisory services	<ul style="list-style-type: none"> <li>● ORIX</li> <li>● ORIX Real Estate</li> <li>● ORIX Asset Management</li> <li>● ORIX Golf Management</li> <li>● ORIX Living</li> <li>● ORIX Real Estate Investment Advisors</li> </ul>	16%
<b>Investment Banking</b>	Real estate finance, commercial real estate asset securitization, loan servicing (asset recovery), principal investment, M&A advisory, and venture capital	<ul style="list-style-type: none"> <li>● ORIX</li> <li>● ORIX Capital</li> <li>● ORIX Investment</li> <li>● ORIX Asset Management &amp; Loan Services</li> <li>● ORIX M&amp;A Solutions</li> </ul>	18%
<b>Retail</b>	Trust and banking services, card loans, life insurance, and securities brokerage	<ul style="list-style-type: none"> <li>● ORIX Securities</li> <li>● ORIX Life Insurance</li> <li>● ORIX Trust and Banking</li> <li>● ORIX Credit</li> </ul>	22%
<b>Overseas Business</b>	Leasing, lending, investment in bonds, investment banking, real estate-related operations, ship and airplane-related operations	<ul style="list-style-type: none"> <li>● ORIX</li> <li>● ORIX USA</li> <li>● ORIX Australia</li> <li>● ORIX Asia</li> <li>● ORIX Leasing Malaysia</li> <li>● ORIX Indonesia Finance</li> </ul>	13%

# Editorial Policy

The "Environmental Report 2009-2010" has been published to familiarize stakeholders with the ORIX Group's various environmental services and activities. Ever since formulating its environmental policy in 2008, the ORIX Group has been pressing ahead with ECORIX2012, a set of environmental initiatives designed to assist in the development of a low carbon society.

The ORIX Group, which conducts a diverse array of businesses centered on the financial sector, is working to help bring about a low carbon society through its own activities, as well as by offering customers services that help them to reduce their environmental impact. For this reason, the bulk of this report is dedicated to introducing the Group's actual environmental support services, without strict adherence to environmental reporting guidelines. Opinions from business partners and comments from Group employees were also included to deepen readers' understanding of the Group's environmental activities.

Currently, the ORIX Group is working to increase the cohesiveness of its organization across Group companies and departments, with the aim of maximizing added value in the environmental field. In this report, we strove to highlight the relationships among the Group's environmental businesses and its overall picture operations in order to clarify the role of each environmental business. In fiscal 2009, the year ended March 31, 2009, we invited Dr. Ryoichi Yamamoto of the Institute of Industrial Science at the University of Tokyo to be a guest contributor to this report. The report features a discussion between Dr. Yamamoto and the ORIX Group COO Yukio Yanase on critical global environmental issues and the Group's future direction.

Furthermore, continuing on from fiscal 2008, Dr. Hidefumi Kurasaka, a professor in the Faculty of Law and Economics at Japan's Chiba University, provides an independent review of this report. In addition to heightening reporting transparency, we hope to reflect his

## ● Intended Readership:

This report has been published for the benefit of a broad range of stakeholders, particularly customers, shareholders and other investors, and Group employees

## ● Scope:

The ORIX Group's environmental activities and services

## ● Period Covered by the Report:

Year ended March 31, 2009 (April 1, 2008 to March 31, 2009)

The report also includes some information pertaining to the period beyond the above-stated period.

## ● Publication Month:

October, 2009

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<http://www.orix.co.jp/eco/>  
TEL 03-6667-2298



# Incorporating Environmental Perspectives Into All ORIX Group Services

Dr. Ryoichi Yamamoto, a professor of the Institute of Industrial Science at University of Tokyo, is a world-renowned leader in the environmental field, and was recently invited to ORIX for a discussion with ORIX Group COO Yukio Yanase. In this section, Mr. Yanase talks with Dr. Yamamoto about his views on global environmental issues, the ORIX Group's future direction and much more.



**Dr. Ryoichi Yamamoto**

Professor, Institute of Industrial Science,  
University of Tokyo

**Yukio Yanase**

Director, Representative Executive Officer, President  
and Chief Operating Officer, ORIX Corporation

### Agreement on 2°C Climate Change Target Marks a Global Turning Point for Ensuring Worldwide Environmental Sustainability

**Yanase:** Today, I would like to discuss several points with you, Dr. Yamamoto, drawing on your expertise as a world-renowned "eco designer" and environmental leader. Some of the points I would like to cover are conditions currently facing the world, and how we should consider the future as we move forward. The ORIX Group aims to work proactively to help enhance the natural

environment. Guided by this thinking, the Group is working to bring together its diverse spectrum of operations to develop environmental businesses. I look forward to hearing your advice in this regard as well.

**Yamamoto:** To develop environmental operations into successful businesses, I believe we must first develop an accurate view of the world we inhabit. I feel that global perceptions in this respect have undergone a profound change over the past two years or so. One perfect example of this is agreement by world leaders on a 2°C



global warming target to limit the global mean temperature increase to no more than 2°C above pre-industrial levels. This agreement was made at both the G8 Summit in L'Aquila, Italy and the Major Economies Forum on Energy and Climate (MEF).

**Yanase:** There is general agreement that any increase in the global mean temperature above 2°C would have a serious impact on humankind. You wrote a book titled "Climate Change+2°C" three years ago to raise awareness of this issue. It seems that this awareness is now gaining currency around the world.

**Yamamoto:** The latest climate simulations now predict that a 2°C global mean temperature rise over the next 20 years or so is now inevitable. The 2°C target has been adopted as a common global climate stabilization objective because 2°C is thought to be the threshold for ensuring a sustainable environment. This worldwide commitment to the 2°C target by not just the G8 nations but also newly emerging countries will have a considerable impact. We must realize that we are witnessing a historical moment.

### **Environmental Fields Harbor Substantial Business Opportunities Now That Drastic CO<sub>2</sub> Reductions Are Unavoidable.**

**Yanase:** We seem to have reached a historical turning point comparable to the industrial revolution.

**Yamamoto:** That's right. We are being called upon to transform our industrial civilization, which has continued apace since the industrial revolution, into an "environmental civilization" that is geared to ensuring a sustainable society.

The 2°C target defines the capacity of the environment, that is, the amount of human activities and pollutants that the Earth can tolerate without suffering serious environmental damage. The significance is that this target will almost automatically determine atmospheric CO<sub>2</sub> and other greenhouse gas concentration as well as the proportion of emissions reductions that need to be made by developed and developing nations. In order to reduce the world's CO<sub>2</sub> emissions by half and hold annual per-capita resource input volume to 6 tons by 2050, Japan will need to reduce per-capita CO<sub>2</sub> emissions by roughly 80% and per-capita annual resource input volume by roughly 70%.

**Yanase:** That means we will need to decarbonize and dematerialize the economy over the next 40 years. In the meantime, the environmental impact is likely to become increasingly serious. Therefore, we will need to spur growth in businesses that address these negative environmental impacts.

**Yamamoto:** Importantly, this means that the environment has the potential to grow into a big business. Naturally, unless recycling and CO<sub>2</sub> emissions reductions are pursued hand in hand, we will fall

behind our targets. Environmental businesses have so far offered only preventive solutions, but I think we will start to see growth in businesses that help people to adapt to the new environmental constraints. Currently, global atmospheric CO<sub>2</sub> concentrations are increasing at an annual rate of 3%. Ten years from now, we will need to start reducing CO<sub>2</sub> concentrations by around 4% a year. This will require a huge effort, but the flip side is that enormous business opportunities should emerge. It is believed that we will see investments will total roughly ¥100 trillion a year, or 1-2% of global GDP.

### **Free Market Economies Unsustainable Without a Viable Environment; Environmental Issues Can Only Be Solved Through Business**

**Yanase:** Most of the businesses ORIX involved fall under the services category, including finance. Therefore, some aspects of our businesses are difficult to understand from outside the company. I've been giving much thought to how the ORIX Group should go about creating environmental businesses and demonstrating leadership in this field.

**Yamamoto:** The problem we are now facing is to combine environmental activities with CSR priorities, and that also means achieving optimal environmental and social design. Conventional green businesses involving the recycling and reuse of materials and CO<sub>2</sub> emissions reductions are woefully inadequate to the task. We need "sustainability businesses" that address the question of how to ensure sustainability for society as a whole. I have no doubt that free market economies will be unsustainable if we destroy the environment. It is imperative that we develop an economy that can thrive under environmental constraints.

**Yanase:** I believe that the environment is a major theme, as we cannot adapt to environmental changes unless we transform our social and industrial structures.

**Yamamoto:** In my opinion, environmental issues cannot be solved through grassroots movements or government action alone. This is because in modern society, human resources, funding, technologies and expertise are concentrated in companies. This is precisely why I have concluded, based on twenty years of experience, that environmental issues cannot be solved unless companies become eco-friendly organizations.

**Yanase:** Conversely, unless environmental initiatives are developed into businesses, environmental issues cannot be solved.

**Yamamoto:** Certainly. I believe that the top priority is to build environmental management and to popularize eco-friendly products and services. In that sense, I applaud the ORIX Group for its efforts to expand its environmental business by leveraging its broad connections with society. I have extremely high hopes for the Group's success.





**Dr. Ryoichi Yamamoto**

Professor, Institute of Industrial Science, University of Tokyo

- 1946 Born in Ibaraki Prefecture
  - 1969 Graduated from Faculty of Engineering, University of Tokyo
  - 1992 Professor, Institute of Industrial Science, University of Tokyo (Current)
- Specialties are materials chemistry, sustainable product development theory, and eco-design principles
- Major Publications
- "Ichibyo No Sekai" (Global Changes in One Second; Editorial Supervision by Ryoichi Yamamoto, published by Diamond Incorporated)
  - "Kikou Hendo +2°C" (Climate Change+2°C; Published by Diamond Incorporated)
  - "Vision and Strategy for a Sustainable Economy" (Union of Japanese Scientists and Engineers)
  - "Ondanka Jigoku-Dasshutsu no Scenario" (Global Warming Hell Scenario on Escape from it; Published by Diamond Incorporated)
  - "Mizumonogatari" (A Story About Water; Published by Diamond Incorporated)
  - "Ikimonogatari" (A Story About Life; Published by Diamond Incorporated) and many others

**Yanase:** ORIX is involved with social infrastructure in a sense through its real estate, automobiles and IT businesses, and therefore action has been inevitable to some extent. However, now that environmental issues are an urgent priority, it is time for the ORIX Group to take a new look at its role and future direction.

### Sense of Fear and Responsibility is Crucial to Business Success in the Face of the Environmental Crisis

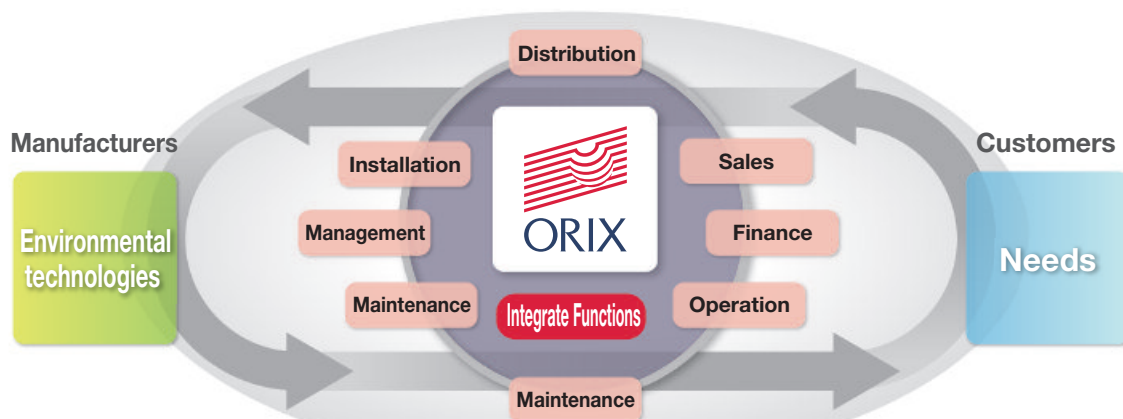
**Yamamoto:** I must now point out something that I'm afraid the Japanese are totally lacking a sense of fear about what may happen if the world continues to use as much resources and energy as it wants on a massive scale, releases CO<sub>2</sub> into the atmosphere, and goes on using and disposing of resources wastefully. I suspect that many Japanese companies, not just ORIX, still have only a weak commitment to thinking about how to avoid this crisis, and how they can help in their own way to transform Japan and the rest of the world into a sustainable society. Left alone, events could take a turn for the worse, possibly leading to climate wars around the world. In that event Japan, with its extremely low rates of energy and food self-sufficiency, would likely suffer a huge blow. I don't think environmental businesses can be successful without this sense of fear and responsibility.

**Yanase:** Without that sense of fear and responsibility you speak of, we will be unable to broaden the scope of environmental operations, leaving us with businesses confined to extremely narrow fields of activity.

**Yamamoto:** The global consensus is that society will not be transformed by 20th century industrialized economies; instead,

### Becoming an Eco Services Integrator

Eco Services stands for an integrated service providing all the functions necessary to using eco products supplied by manufacturers, in line with customer needs. ORIX aims to become an Eco Services Integrator that comprehensively provides a variety of functions.







society must strive for a dematerialized, knowledge-intensive economy. It is important to recognize that eco-friendly products alone are not enough. It is equally crucial to provide eco-friendly services that deliver those products to society in an efficient, sustainable way. Both elements are needed to succeed. Therefore, it is highly encouraging to see services-oriented companies like ORIX moving into the eco services field.

**Yanase:** We believe that the ORIX Group has the ability to take the initiative in providing services. For example, the car-sharing business undertaken by the ORIX Group provides all automotive services except for the production of vehicles. The business incorporates the concept of getting people to utilize products in the most environmentally friendly way possible, rather than continuously manufacturing those products. As a non-manufacturer, we must go one step further by exercising this type of ingenuity. The ORIX Group possesses business infrastructure, and I want to reflect environmental principles in this infrastructure to add value to our services. I believe it is extremely crucial to incorporate these principles into all manner of Group activities. In Japan, there is still some resistance to paying for what is perceived to be a pure service. However, it is imperative that we develop businesses that generate firm fee-based income through the services we provide.

### Creating Sustainable Value and Shifting Gears to Eco Services That Reflect Environmental Perspectives

**Yamamoto:** The main priority in the 1990s was "eco efficiency", how to raise environmental efficiency. In the 2000s, the key phrase is "sustainable value creation." In other words, businesses addressed the question of how to generate sustainable value. In my view, Japan has put too much emphasis on manufacturing and has lost touch with businesses that consider how to best operate and use what has been manufactured.

Japan's strengths lie in fundamental technologies. Ultimately, however, it is the West that profits from big businesses that combine fundamental technologies purchased from Japan. In the global environmental business, the U.S. leads the pack, followed by EU in second place and Japan in third. In fact, Japan accounts for only around 10% of the global market for environmental services. I believe that environmental businesses can be backed up by Japan's cutting-edge environmental technologies, and that a national strategy for exporting this "culture" to Asia should be implemented. By culture, I mean the culture of "sustainable value creation" and marketing sustainable value around the world. Naturally, each ethnic group has its own unique form of sustainable value to offer.

**Yanase:** We really need to embrace the overarching goal of creating businesses that go beyond the existing scope of our operations to help ensure the sustainability of our planet. One crucial step will be to prioritize what we must accomplish most urgently over the next ten years.

**Yamamoto:** Absolutely. In terms of domestic demand, I believe that one priority is to shore up domestic production and consumption of food and energy in Japan. In terms of overseas demand, particularly from Asia and Oceania, we need to start a movement where we export our "eco culture," that is, Japan's own form of sustainable value, to other countries. In this context, the ORIX Group may want to consider adopting different strategies for Japan and the rest of Asia.

**Yanase:** As the ORIX Group COO, I believe we need to shift gears from conventional eco products to the creation of eco services that reflect environmental perspectives.

Thank you for sharing with us today your many thought-provoking insights and concrete advice on various issues.



**Yukio Yanase**

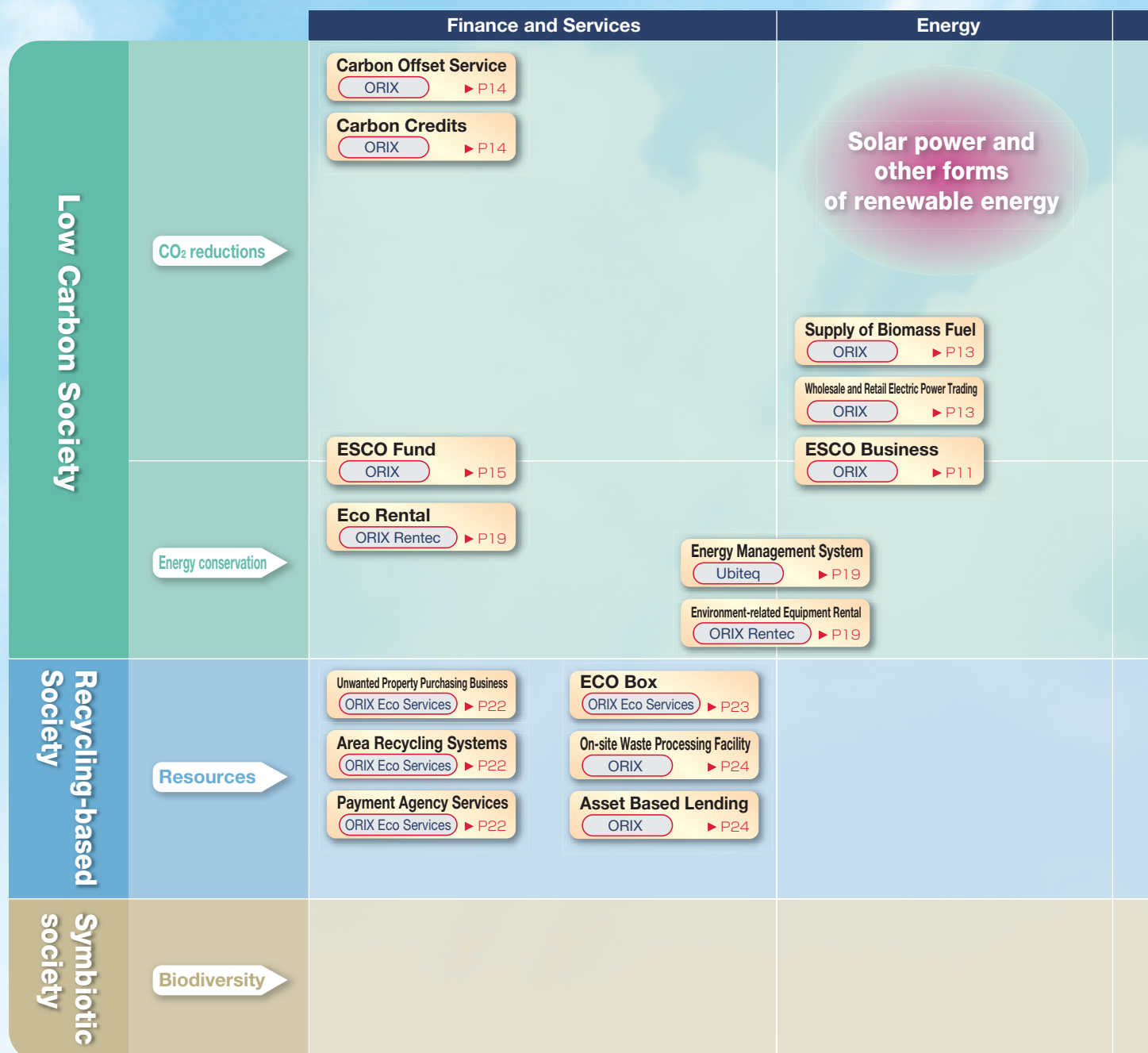
Director, Representative Executive Officer, President and Chief Operating Officer, ORIX Corporation



# The ORIX Group's Eco Services

The ORIX Group has constantly developed new businesses based on an accurate grasp of current developments. In the environmental field, the Group will continue to tackle the challenge of creating eco services that help to bring about a sustainable society.

## Eco Services Business Domains



### Glossary of Environmental Terms Used in this Report

- **ESCO (Energy Service Company)**

These businesses provide comprehensive services pertaining to energy efficiency for factories and buildings, and guarantee the resulting energy conservation benefits.

- **Carbon Offsets**

Used to counterbalance greenhouse gas emissions from various activities through reductions achieved elsewhere by others, so as to achieve zero net CO<sub>2</sub> emissions.

- **CDM (Clean Development Mechanism)**  
**CER (Certified Emission Reduction)**

One type of CDM based on Article 12 of the Kyoto Protocol. Through its implementation, the CER mechanism aims to help developed nations achieve their CO<sub>2</sub> reduction targets, while assisting the sustainable development of emerging nations. CER refers to CO<sub>2</sub> emissions credits generated by greenhouse gas reduction projects implemented as part of CDM.





Services Provided  
(Service providers and page references are shown.)



Future Priorities

Automobiles	Real Estate	Facilities Operation
<p><b>Eco-friendly Car Rental</b> ORIX Auto ▶ P17</p> <p><b>Introducing Electric Vehicles</b> ORIX Auto ▶ P17</p> <p><b>Popularization of hybrid and electric vehicles</b></p> <p><b>Car-Sharing</b> ORIX Auto ▶ P17</p> <p><b>Telematics</b> ORIX Auto ▶ P16</p>	<p><b>Eco-friendly Real Estate Development</b> ORIX Real Estate ▶ P18</p> <p><b>Making Buildings Energy Efficient</b></p> <p><b>Soil Contamination Countermeasures</b> ORIX Eco Services ▶ P24</p>	<p><b>Biomass power generation</b> Agatsuma Bio Power ▶ P13</p> <p><b>Gasification Furnace</b> ORIX Environmental Resources Management ▶ P25</p> <p><b>Industrial Waste Processing, Collection and Transport</b> Funabashi Eco Services ▶ P25</p> <p><b>Water</b></p> <p><b>Aquarium Operation</b> ORIX Real Estate ▶ P27</p>

● **FIT**  
(Feed-in Tariff)

An arrangement where solar power and other forms of electrical power are purchased at a high fixed price for a certain period in order to encourage the widespread adoption of renewable energy (collective term for energy extracted from recurring natural phenomena)

● **On-site Waste Processing Facility**

A facility for processing waste at its source, such as factories.

● **ABL**  
(Asset Based Lending)

Loans provided using current assets as collateral, such as corporate inventories and trade receivables.

● **NEDO**

Japan's New Energy and Industrial Technology Development Organization.

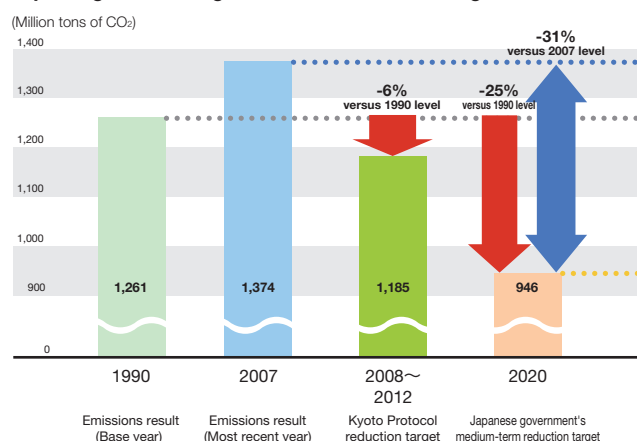


# Recent Global Warming Developments and ORIX Group Solutions

As global warming reaches crisis proportions, the world is making a profound shift to a low carbon society for the sake of future generations. The ORIX Group is committed to supporting both environmental and economic activities by providing services that are consonant with the world's new systems and values.

The Kyoto Protocol was adopted in December 1997 and came into force in February 2005. This agreement's overall objective calls on all developed countries to reduce their total greenhouse gas emissions by 5% or more from the 1990 level during the First Commitment period from 2008 to 2012. (Japan has agreed to a 6% reduction target.) Currently, negotiations are under way on a framework for the Second Commitment period that will commence after the first Kyoto Protocol emissions reduction period.

**Japan's greenhouse gas emission reduction targets**

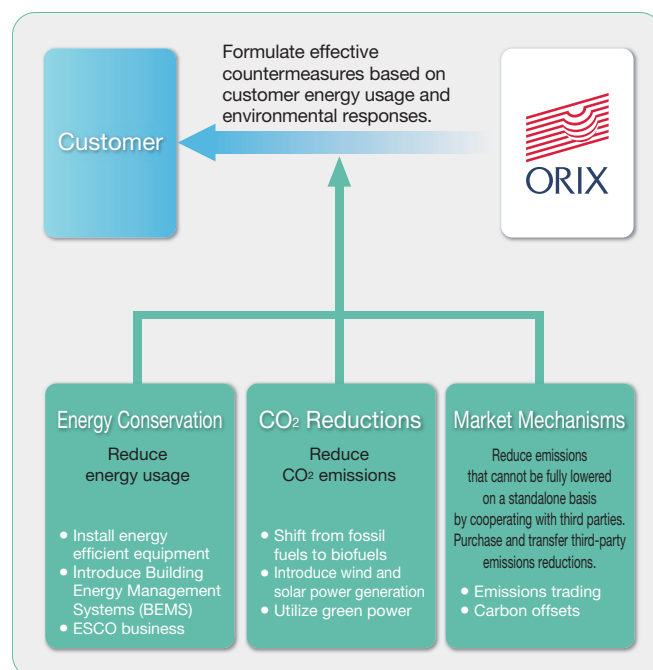


The world must now shift gears to a low carbon society by shedding its dependence on fossil fuels, which has been built up since the industrial revolution. The main cause of global warming is the continuous release of CO<sub>2</sub> and other greenhouse gases into the atmosphere as a result of the massive use of fossil fuels such as oil, natural gas and coal. It is imperative to stop any further increase in atmospheric greenhouse gases. Accordingly, one solution to the global warming issue is to reduce the use of fossil fuels as much as possible, and thereby rid society of its dependence on fossil fuels.

The first way to reduce CO<sub>2</sub> emissions is to conserve energy. Companies can do this easily through energy efficient business operations that reduce inefficiency, such as by turning off lights and controlling air conditioner settings. This approach also leads to cost reductions. The ORIX Group provides support services for installing energy efficient equipment at factories and buildings, upgrading existing facilities to energy-efficient equipment, and purchasing eco-friendly cars.

The second way is to shift from fossil fuels to clean forms of energy that release very little CO<sub>2</sub> emissions. One particularly promising area is solar power generation, a prime example of clean energy usage. There are high hopes for the use of solar energy to become prevalent in the housing sector. The Japanese government considers this to be an important policy, and is promoting the widespread adoption of

solar power in housing through subsidies and the planned introduction of a feed-in tariff (FIT<sup>\*1</sup>) system. In its role as a service integrator, the ORIX Group will provide a range of highly energy efficient services. The third way of addressing global warming, particularly emissions that cannot be reduced on a standalone basis, is through cooperation with third parties. Internationally, emissions credit mechanisms such as CER<sup>\*2</sup> have been developed based on the Kyoto Mechanism, while in Japan, a domestic emissions credit trading scheme has been launched via an integrated domestic market based on the voluntary action plans of various companies. Through the use of emissions trading and carbon offsets, the ORIX Group actively supports schemes that enable the emissions reductions achieved by other companies to be deducted from the Group's own emissions.



\*1 FIT: Please see the glossary on page 9.

\*2 CER: Please see the glossary on page 8.

Since the mid-1990s, we have focused on the energy field, and have provided customers with a range of methods to address their need to lower CO<sub>2</sub> emissions. These range from investment in power generation businesses to ESCO businesses, including clean energy fuel conversion, and various forms of support for reducing CO<sub>2</sub> emissions. We have also helped to promote low carbon management through market mechanisms such as emissions trading and carbon offsets. Going forward, we will continue to harness the diverse spectrum of financial services across the ORIX Group to capture synergies, as we press ahead with activities aimed at realizing a low carbon society.

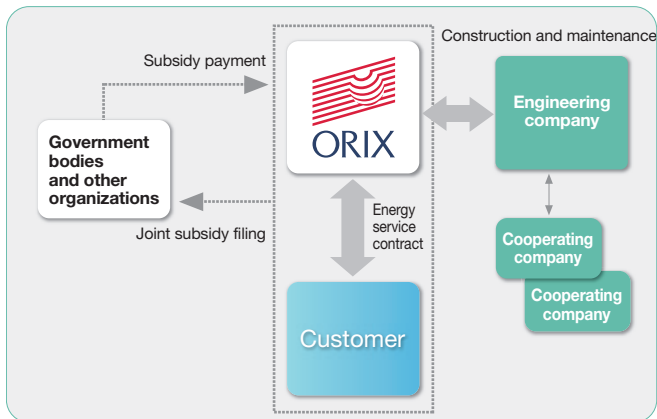


# Energy Conservation Support Services ORIX

ORIX Corporation is helping customers to reduce costs and CO<sub>2</sub> emissions in line with increasingly strict laws and regulations by conducting energy conservation, clean-energy fuel conversion and a host of other ESCO businesses.

## ESCO Business

ESCO (Energy Service Company) businesses provide comprehensive services pertaining to energy efficiency for factories and buildings, thereby achieving energy conservation without compromising the existing level of environmental performance. In the ESCO business, energy cost reductions attributable to the ESCO business itself cover various costs, including installation costs for energy efficient equipment, equipment maintenance costs, and the cost of assessing the energy conservation benefits. The ESCO business model has been embraced by many private-sector companies and local governments as a means of simultaneously conserving energy and reducing running costs.



## ESCO Business for Transport and Warehousing Operators

Japan's national energy consumption remained largely unchanged in the industrial sector, but had roughly doubled in the transportation sector from fiscal 1973 to fiscal 2007. In the transportation sector as a whole, progress with energy conservation has been slow, although various companies have been working in various ways to conserve energy. For operators of transportation and warehousing businesses, ORIX has been proposing the installation of energy efficient facilities at their warehouses. In the process, ORIX provides a range of services, including energy conservation assessments, assistance with subsidy filings, and making investments on behalf of customers. These proposals enable customers not only to lower their CO<sub>2</sub> emissions, but also to drastically reduce costs. In addition, ORIX offers optimal services in partnership with an engineering company that has outstanding technical expertise, and also helps customers file for government subsidies to deliver highly cost-effective proposals to customers.



Before lighting conversion



After lighting conversion



## Example of Service Provided to Customer

For Konoike Transport Co., Ltd., ORIX converted lighting at three logistics bases into energy efficient lighting fixtures. Mercury and fluorescent lamps in warehouses were replaced with highly energy-efficient lighting to achieve energy conservation and improve the interior environment of the warehouses.

### Customer Feedback

#### Konoike Transport Co., Ltd.

Manager  
Procurement Department

#### Junji Kishida

At Konoike Transport we have been pulling together the entire company to actively address environmental issues. Efforts are focused on promoting environmental protection measures including "Eco Drive" concepts and green purchasing. Based on a proposal from ORIX, we converted lighting at three logistics centers to energy efficient lighting fixtures. As a result, we now anticipate CO<sub>2</sub> emissions reductions of roughly 102 tons a year compared with the fiscal year ended March 31, 2008. We look forward to receiving more energy conservation proposals for other company sites going forward.



### A Word From the Manager

Energy and Eco Services Department  
ORIX Corporation

#### Masato Koyama



ORIX assisted Konoike Transport with filing procedures for NEDO's "Energy Use Rationalization Business Supporting Program" and made investments on behalf of this customer. As a result, we were able to replace the company's warehouse lighting with state-of-the-art lighting fixtures and reduce the company's environmental impact. This ESCO business has been applauded by Konoike Transport and many other transportation and warehouse operators as well.



## ESCO Business Expansion ORIX

ORIX conducts a diverse spectrum of ESCO businesses ranging from custom-order projects for customers operating large facilities and factories to customers operating chain stores and other types of extensive business networks.

### ESCO Business with Installation of VOC Processing Facility

Volatile organic compounds (VOCs) are one category of hazardous gases subject to emissions regulations under Japan's Air Pollution Control Law. ORIX has been proposing the installation of VOC processing facilities (micro gas turbines and heat storage combustion and deodorization equipment) that offer high disposal efficiency and energy conservation benefits for VOC-emitting business operators engaged in printing, painting, industrial cleaning, adhesive application and other such processes. In a typical project, ORIX will jointly apply with the customer for the subsidy program\*<sup>1</sup> offered by Japan's Ministry of Economy, Trade and Industry, and will provide customers with assistance ranging from subsidy filings, post-installation maintenance, and guarantees of VOC elimination rates. Through this service, customers are able to simultaneously address their legal and regulatory requirements, implement environmental measures, conserve energy and reduce costs.

\*1 Projects to install energy conservation facilities and technologies that offer superior energy savings and cost benefits are eligible for the Ministry of Economy, Trade and Industry's subsidy program.



VOC Processing Facility

### ESCO Business for Foodservice Operators

Following amendments to the Law Regarding Rationalization of Energy Use, the scope of application of regulations has been expanded from the business site level to the company level. As a result of the amendments, family restaurants, fast food restaurants, convenience stores, and other businesses operating multiple business sites are now subject to regulations under the amended law. ORIX is prepared to provide a range of proposals tailored to customers' environmental needs. As a means of conserving energy, we can upgrade facilities, provide control systems for equipment, enhance operations, and measure energy usage. Specifically, we design and propose energy efficient business sites, reduce the initial investment outlay at the implementation phase, and support various procedures related to compliance with the Law Regarding Rationalization of Energy Use. Our proposals extend beyond installation of energy efficient equipment, and incorporate combinations of existing power sources with renewable energy such as solar power. Through this service, customers can hold down investment outlays while upgrading to energy efficient facilities that release fewer CO<sub>2</sub> emissions.



Electric water heater



#### Example of Service Provided to Customer

ORIX installed heat storage deodorization equipment at Nichiban Medical Corporation, a manufacturer and seller of medical products. The equipment processes and incinerates VOC gases, while recovering and storing heat from the incineration process to ensure highly energy efficient operations.

#### Customer Feedback

##### Nichiban Medical Corporation

Advisor  
Quality Assurance Department

##### Hiroshi Kakuta



Nichiban Medical had been making group-wide efforts to achieve its CO<sub>2</sub> and VOC emissions reduction targets. However, our energy consumption had increased because the VOC incineration process consumes fuel, leading to higher CO<sub>2</sub> emissions. Through ORIX's proposal, we were able to achieve highly energy efficient operations and this has helped us to achieve our dual reduction targets for both VOC and CO<sub>2</sub> emissions.



#### Example of Service Provided to Customer

Colowide Co., Ltd., a restaurant chain operator, has adopted a proposal by ORIX to upgrade facilities at its Hama Cho Shonan Lifestown restaurant to energy efficient equipment. As a result, Colowide achieved a 9.8% reduction in energy usage at the restaurant.

#### Customer Feedback

##### Colowide Co., Ltd.

Manager  
Corporate Planning Department

##### Yoshiyuki Ogino

In the foodservice business, we are responsible for the health of guests at our restaurants. Over the years, Colowide has sought to ensure not just the traceability of all beef used at its restaurants, but has also paid the closest attention to instructing frontline food preparation staff about food safety. To ensure that we continue to fulfill our corporate social responsibilities, we plan to take ongoing steps to reduce our environmental impact, building on our first energy efficient restaurant. We look forward to hearing more proposals from ORIX going forward.



# Developing New Energy Sources

ORIX continues to bring clean energy into the mainstream by promoting biomass boiler fuel conversion, biomass power generation and other power generation business that provide new sources of energy that reduce greenhouse gas emissions.

## Biomass Fuel Conversion

Biomass matter refers to renewable organic resources derived from plant or animal matter (but excluding fossil fuels). Biomass matter has been attracting attention in recent years as a "carbon neutral\*" resource that does not cause any net increase in atmospheric CO<sub>2</sub> when used.

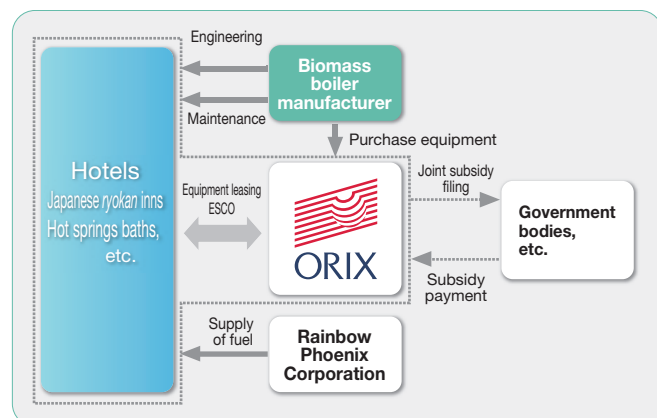
\*1 "Carbon neutral" refers to the process of balancing the emission and absorption of CO<sub>2</sub> so as to achieve zero net emissions of the entire lifecycle of materials. For example, CO<sub>2</sub> emissions resulting from burning plant biomass are offset by CO<sub>2</sub> absorption by plant matter through photosynthesis during their growth. As a result, the burning of plant biomass has no net impact on atmospheric CO<sub>2</sub> levels.

ORIX offers proposals to customers operating energy-intensive facilities such as hotels and hot-springs baths, to switch from using fossil fuels such as heavy oil in existing boilers, to biomass fuel. Fuel conversion enables customers to slash costs, stabilize fuel prices, reduce their environmental impact and contribute to a low carbon society. ORIX proposes optimal plans in terms of cost and environmental performance that cover such topics as the selection of boilers and analysis of fuel conversion efficiency based on the findings of assessments of the heat-usage status of customer facilities.

On the other hand, Japan is currently experiencing a shortage of biomass fuel in the form of wood chips and pellets from construction waste, and supplies are unstable. In response, ORIX is working with Rainbow Phoenix Corporation to purchase, import and supply biomass fuel produced overseas (Indonesian palm kernel shells) in Japan. We also provide the financing (via ESCO or leasing services) needed for capital investment in biomass boilers. Other services include installing biomass boilers on customer sites, arranging the procurement of biomass fuel, and assisting with subsidies when making capital investments.



Palm kernel shells



## Wood Biomass Power Generation Business

ORIX is engaged in the biomass power generation business as an investment partner in Agatsuma Bio Power Co., Ltd. Tokyo Gas Co., Ltd. has also joined this environmentally friendly power generation business as an investor.

Agatsuma Bio Power operates a biomass power generation business using wood chip biomass as fuel. The wood chips are produced from crushed biomass resources such as pruned branches and waste materials. Construction of a 13,600 kW wood chip biomass power plant is now under way in Higashi Agatsuma Town in Agatsuma County, Gunma Prefecture, with the aim of launching commercial operations in March 2010. One advantage of wood chip biomass power generation is that scheduled power plant operations are possible irrespective of weather conditions. This business will supply an amount of electricity equivalent to that used by roughly 23,000 households, which represents roughly 3% of the total number of households in Gunma Prefecture. Based on this, compared with power generation using conventional fossil fuels, the biomass power plant will reduce CO<sub>2</sub> emissions by approximately 47,000 tons per year.



Construction of Agatsuma Bio Power's Wood Chip Biomass Power Plant is under way.

## Retail Electric Power Trading Business

ORIX has joined the retail electric power trading business within the transmission area of the Tokyo Electric Power Company, and is engaged in retail trading mainly with high-voltage customers in the private sector. We hope to help mitigate global warming by harnessing the expertise we have gained through this business while striving to raise the share of renewable energy in our procurement mix.



## Carbon Solutions

ORIX

ORIX Eco Services

One key issue that arises in the course of CSR (corporate social responsibility) activities is the need to balance CO<sub>2</sub> emissions reductions with the demands of business activities. ORIX addresses this issue by using carbon offsets to help its customers raise their corporate value.

### Carbon Offsets, Carbon Credits and CDM Projects

Calls for CO<sub>2</sub> emissions reductions are becoming increasingly stronger by the day as global warming looks likely to reach crisis proportions in the near future. In these times, companies are now expected to take responsibility not only for CO<sub>2</sub> emissions generated by business activities, but also for CO<sub>2</sub> generated by the products and services they supply. Therefore, CO<sub>2</sub> emissions have begun to have a serious bearing on corporate management. Drawing on its wealth of experience in environmental businesses, ORIX provides carbon solutions that optimize the entirety of customer business operations. In addition to supplying carbon emission credits sought by customers (including CERs, VERs, JPAs, domestic credits, etc.\*1), ORIX also develops and provides one stop services through proposals geared to satisfying each customer's unique needs. The ORIX Group provides carbon offset services in the categories of business activities, products and services, events, and stakeholder participation\*2.

A number of events led up to ORIX launching its carbon emissions credit business: in 2006 ORIX first became involved in CDM\*3 projects, when it was commissioned by NEDO\*4 to conduct a survey of such projects. ORIX also became a participant in Japan's Voluntary Emissions Trading Scheme, run by the Ministry of the Environment, enabling it to trade JPAs. ORIX subsequently

participated in trials for a mandatory emissions trading scheme in Japan, launched in 2008, and took part in projects using domestic emission credits.

The carbon solutions business at ORIX grew out of its environmental solutions operations, and through carbon solutions ORIX aims to enhance its customers' environmental value and contribute to their businesses.

\*1 Emission credits are grouped into the following categories:

CERs (Certified Emission Reductions): Emissions credits deriving from CDM projects based on the UN's Kyoto Protocol and Kyoto Mechanism. Please refer to the glossary on page 8.

VERs (Verified Emission Reductions): Collective name for non-CER emissions credits.

JPAs (Japan Allowances): Emissions credits based on Japan's Voluntary Emissions Trading Scheme (JVETS), run by the Ministry of the Environment.

Domestic credits: Emissions credits based on the domestic credit system, run by Japan's Ministry of Economy, Trade and Industry.

\*2 Carbon offsets are grouped into the following categories:

Business activities: Offsets for CO<sub>2</sub> emissions generated by a company or other organization's facilities, business operations, marketing activities or employees' commuting.

Products and Services: Offsets for CO<sub>2</sub> emissions generated by products or services supplied by a company or other organization.

Events: Offsets for CO<sub>2</sub> emissions generated by events or meetings hosted by a company or other organization.

Stakeholder Participation: Offsets for CO<sub>2</sub> emissions related to products supplied by a company or other organization, or to events.

\*3 CDM (Clean Development Mechanism): Please refer to the glossary on page 8.

\*4 NEDO: Please refer to the glossary on page 9.

### Example of Service Provided to Customer



Leading systems integrator TIS Inc. adopted carbon offsets for its housing services at its next-generation data center, TIS Shinsaibashi green Data Center. ORIX was commissioned by TIS to establish the framework, provide and offset CERs and to operate the offset services. TIS, meanwhile, was able to offer data center customers services for which the CO<sub>2</sub> emissions had been offset.

#### Customer Feedback

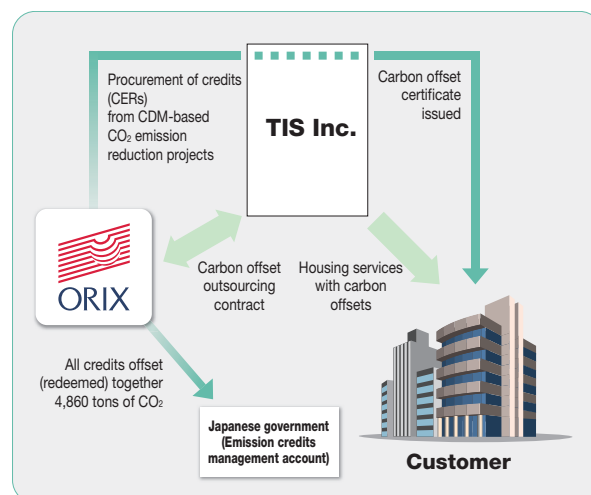
##### TIS Inc.

Executive Officer  
Outsourcing Platform Management Dept, IT Platform Services Business Div.

##### Makoto Tsujimoto



TIS designed its Shinsaibashi green Data Center, which opened fully in May 2009, to be as environmentally friendly as possible. We installed energy-efficient facilities and adopted solar power generation, in addition to employing LED lighting and motion sensors throughout our machine rooms. Going one step further, we are now making use of ORIX's carbon offset service to provide data center services that enhance environmental value for our customers.





# Finance and the Environment ORIX

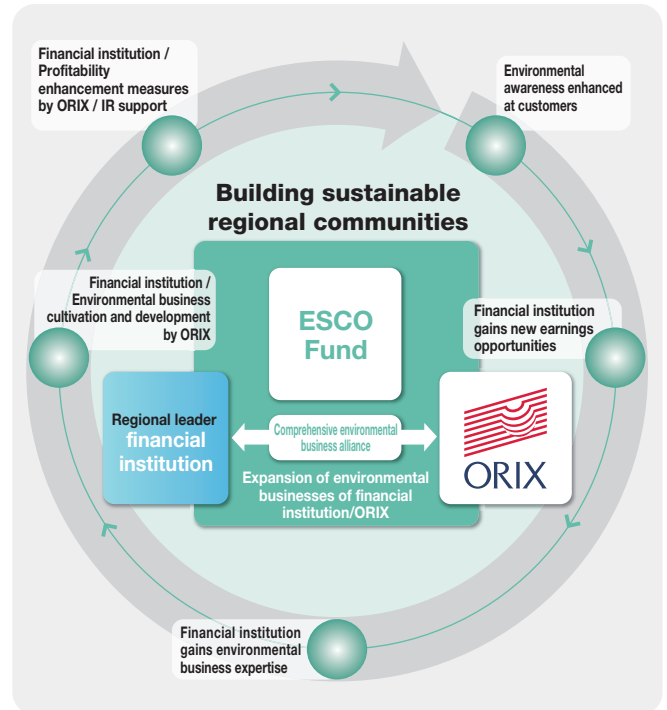
The enforcement of Japan's amended Law Concerning the Rational Use of Energy has prompted companies to conserve energy in a diverse range of fields. ORIX is joining forces with regional financial institutions to take a community-based approach to reducing greenhouse gas emissions.

## A Collaborative Approach to Environmentally Friendly Investment

The ESCO Fund is an investment scheme targeting only eco-friendly capital expenditures. By combining ORIX's expertise in ESCO (Energy Service Company) operations and other energy services with the regional information networks of financial institutions, ORIX and its partners are able to identify customers' wishes efficiently and propose solutions for them. By bolstering its collaboration with financial institutions in this way, ORIX intends to contribute to its customers' growth strategies.

One feature of ESCO projects is that they make it easy for companies to install eco-friendly facilities by providing a means of simultaneously lowering costs. The upshot is that there is a need for comparatively long-term contracts to be signed. However, the ESCO Fund provides an arrangement for supporting companies' long-term funding needs via financial institutions that are strongly committed to the decarbonization of regional communities and revitalization of local economies. With this arrangement in place, ORIX can now address the environmental issues of its customers.

Going forward, ORIX will continue partnering with financial institutions to help reduce greenhouse gas emissions in regional communities.



### Customer Feedback

#### The Shiga Bank, Ltd.

Assistant to Manager  
Business Promotion Department

#### Kohei Yoshida



The Shiga Bank made the environment to its business at a very early stage. In 1998, we launched Eco Clean Fund to offer low-interest loans to enterprises undertaking eco-friendly capital investment. We are now offering a groundbreaking scheme with ORIX that enables us as a financial institution to recommend optimal investments to reduce energy consumption and CO<sub>2</sub> emissions to medium-sized enterprises in our region, and to support them in implementing these investments. We are committed to this scheme as we believe it can make a real contribution to creating a low carbon society.

### Customer Feedback

#### The Kiyo Bank, Ltd.

Acting General Manager In Charge of Corporate Client Planning  
Pyxis Marketing Division  
Business Promotion Division

#### Hiroyuki Yamamoto



The Kiyo Bank aims to be a clean, eco-friendly bank. We have partnered with ORIX to offer proposals for installing eco-friendly facilities to our regional customers. ESCO projects in particular offer our customers the opportunity to lower energy costs and to transform themselves into eco-friendly enterprises. We will continue to take an active role in pursuing such projects, thereby helping to preserve the environment in our region.

### A Word From the Manager

Environment&Recycling  
Department

Manager

#### Junko Kishino



I think that the proactive approach the two banks have adopted in tackling environmental issues is raising awareness of such issues among customers in the areas where they operate. As a result, many of the banks' customers are now enthusiastic about taking action to preserve the environment, and we have had numerous opportunities to work with the banks in presenting proposals to them. We are now conducting marketing activities to identify specific customer needs.



# Vehicle Management and the Environment

ORIX Auto

Companies that operate vehicles must now implement comprehensive risk management, encompassing not just compliance with laws and ordinances, but also personnel involved with vehicle operations.

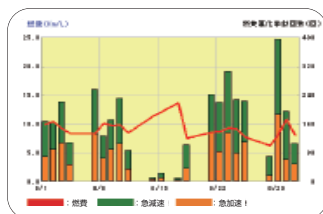
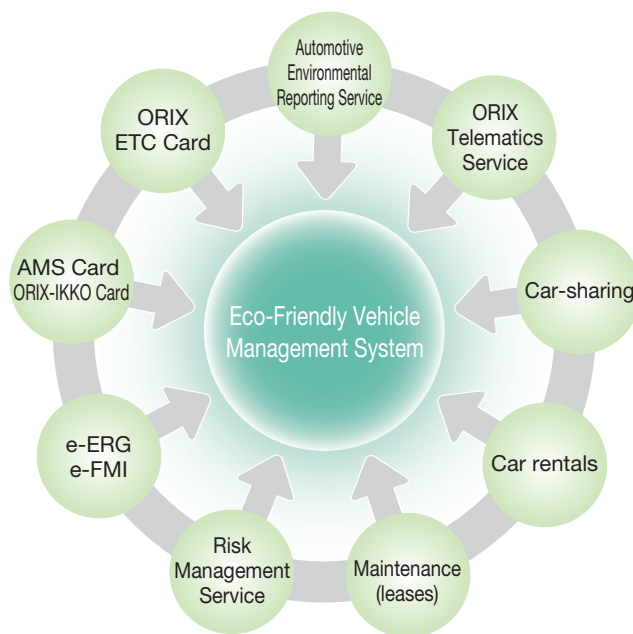
## Eco-Friendly Vehicle Management

ORIX Auto provides total solutions based on the theme of "compliance management covering personnel and vehicles."

The ORIX Telematics Service provides logs of vehicle operation data on a vehicle-by-vehicle basis, and thereby enables previously unknown individual driving characteristics to be easily determined. "Eco Drive" concepts can be implemented with ease by ranking drivers in terms of fuel economy based on field data collected. Another way is to conduct self-assessments of "Eco Drive" proficiency by plotting on graphs the frequency of engine idling, rapid accelerations and other driving parameters. Furthermore, the ORIX Telematics Service enables the timely monitoring of driving behavior at the individual vehicle level, and therefore fleet managers can provide accurate guidance to each and every driver based on quantitative standards. This can be expected to act as a deterrence against poor driving habits. This telematics service also facilitates better driving behavior and fuel savings, not to mention raising the bar of customers' CSR activities.

By combining the ORIX Telematics Service with many other services such as maintenance leases, environmental data support, the "e-ERG" vehicle management system, and AMS cards for paying fuel charges, ORIX Auto is helping customers to comply with environmental laws and ordinances.

## Lineup of Main ORIX Auto Services



## Example of Service Provided to Customer

In February 2009, Canon Marketing Japan Inc., a firm responsible for marketing Canon products and related solutions in Japan, signed up for the ORIX Telematics Service. This data service addresses the customer's needs in a myriad of areas such as compliance, the environment, safety, CSR enhancements, vehicle management, and fleet-size reductions.

### Customer Feedback

#### Canon Marketing Japan Inc.

General Affairs Planning Dept.  
General Affairs Div.  
General Affairs Headquarters

**Hiroyuki Iwaki** (left), Manager  
**Toshiko Kai** (middle), **Tsuyoshi Yamataka** (right)



The Canon Group's corporate philosophy is codified in the word "kyosei" (co-existence), which expresses the Group's desire to build better relationships with not only customers but also society and the environment.

The ORIX Telematics Service gives us the ability to monitor the operating status of our company car fleet, and this has allowed us to reduce the fleet size. The system is also used to monitor fuel economy and check for rapid accelerations or decelerations, and speeding. This has proven useful in promoting "Eco Drive" concepts and in reducing the number of accidents and traffic violations involving company cars.



### A Word From the Manager

Telematics Consulting Team  
Office of the President  
ORIX Auto Corporation

Manager  
**Ryuhei Yokoyama**

Canon Marketing Japan has long been actively engaged in environmental protection activities. The company is implementing "Eco Drive" concepts through the introduction of the ORIX Telematics Service. There is a gradually growing consensus among companies that "Eco Drive" concepts lead to safe driving (i.e., more considerate driving), and in turn produce cost savings. I'm confident that this service will remain an essential tool for customers going forward.



# Providing Access to Eco-Friendly Vehicles

ORIX Auto

ORIX Auto proposes the most intelligent and eco-friendly ways of using vehicles to customers by offering a combination of three different types of services: auto leases when vehicles are always needed, rental cars to address short-term needs such as those arising during peak business periods, and car-sharing for vehicle use of several hours.

## Car-Sharing

"Car-sharing" is a car rental system in which numerous individuals share the use of several cars. Car-sharing customers pay a fee according to the duration of vehicle use and driving distance. Compared with using company cars or personally owned vehicles, customers using car-sharing on a temporary basis can save money because maintenance costs such as insurance premiums, taxes, and car inspections are included in the car-sharing fee.

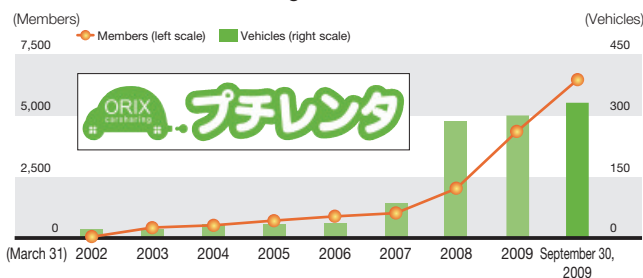
The popularization of car-sharing is expected to reduce the total number of vehicles used by society as a whole, leading to fewer CO<sub>2</sub> emissions and less traffic congestion, among other benefits. In this sense, car-sharing is a smart and eco-friendly way of using vehicles.

### ● Car-Sharing Usage

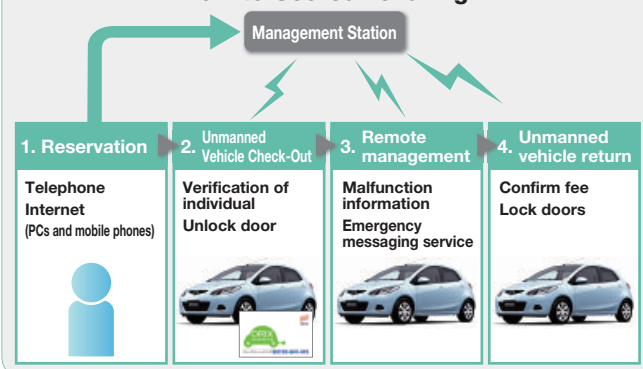
To utilize car-sharing services, customers must first register as members. After becoming members, customers will be issued an IC card. They will then use the Internet or a mobile phone to make a car-share reservation. The car-sharing vehicle will be parked at an unmanned check-out station (parking lot). Unlike rental cars, car-sharing requires no administrative processing at an office. Customers simply hold their IC cards over card readers installed in vehicles to gain access to their cars.

ORIX Auto currently conducts the car-sharing business in various locations in the Tokyo metropolitan area (Tokyo, Kanagawa, and Chiba), Aichi Prefecture, and Kyoto. The car-sharing network is now being expanded. As of September 30, 2009, ORIX Auto's car-sharing business was the largest operation of its kind in Japan, comprising approximately 6,500 members and a fleet of 330 vehicles.

No. of ORIX Auto Car-sharing Vehicles and Members



### How to Use Car-sharing



### ● Linking Car-Sharing With Public Transit

ORIX Auto believes that linking car-sharing with public transit is an effective means of countering global warming. Guided by this thinking, in February 2009, ORIX Auto set up car-sharing stations near 10 subway stations along the Toei Subway Asakusa Line. In April, car-sharing stations were set up in proximity of all 29 train stations along the JR Yamanote Line. With this step, we are promoting the combined use of public railway transportation and car-sharing services. In future, ORIX Auto seeks to build car-sharing networks around locations in urban areas, with the aim of developing car-sharing into a fourth mode of public transit along with railways, buses and taxis.

### ● Electric Vehicles

Electric vehicles are now in the limelight as a promising next-generation automobile, and there are high hopes that vehicle costs will be reduced and the charging infrastructure will be put in place and expanded going forward. Because electric vehicles are optimal for short-distance trips of a few hours, ORIX Auto has begun incorporating the i-MiEV electric vehicle into its car-sharing fleet from October 2009. By combining electric vehicles with car-sharing, a useful service for reducing environmental impact, ORIX Auto aims to step up its contribution to the fight against global warming.



## Incorporating Hybrid Vehicles Into the Car Rental Business

Amid growing environmental awareness among customers, it is absolutely essential that ORIX Auto incorporate eco-friendly vehicles such as hybrid vehicles into its car rental fleet. ORIX Auto has deployed roughly 800 new-model hybrid vehicles, such as the Honda Insight and Toyota Prius, at ORIX Rent-A-Car, Rent-A-Car Japaren and X Rent-A-Car outlets across Japan. Hybrid trucks are also being deployed in October 2009.

### Customer Feedback

#### Sohgo Security Services Co., Ltd. (ALSOK)

Manager  
General Affairs Department  
Kawasaki Branch

#### Kouichi Hamada



ALSOK's management philosophy is based on a spirit of gratitude towards society. Based on this tenet, we are engaged in social contribution programs such as ALSOK ANSHIN Classes (crime-prevention workshops for school children), and environmental protection measures. In this context, the Kawasaki Branch utilizes car-sharing services as a means of lowering its environmental impact. Notably, ORIX Auto's car-sharing services incorporate carbon offsets, and we believe that this facet of its car-sharing services will allow us to reduce our environmental impact even further going forward.

## Developing Real Estate With High Environmental Performance ORIX Real Estate

There is a strong connection between the global environment and the real estate business, and companies involved in real estate carry a great responsibility. ORIX Real Estate Corporation, which owns and manages office buildings and residential property, pursues high environmental performance in its real estate development.

### Comprehensive Assessment System for Building Environmental Efficiency (CASBEE)

ORIX Real Estate seeks to reduce the environmental impact of its buildings. Among past developments, the RECO-City Grande condominium complex in Adachi Ward, Tokyo, and The Tower Osaka in Fukushima Ward, Osaka, have both received "A" rankings under CASBEE.

CASBEE, an acronym for Comprehensive Assessment System for Building Environmental Efficiency, is a system for objectively ranking the environmental performance of buildings. Assessment methods for CASBEE are broadly categorized in terms of environmental quality and performance and environmental impact). Assessments range across more than 50 different categories with 5 possible rankings, from S (highest possible) to A, B+, B- and C.

### Minatomirai Center Building: An environmentally conscious multi-purpose facility

The Minatomirai Center Building, a project being jointly promoted by ORIX Real Estate, Daiwa House Industry Co., Ltd. and Ken Corporation, has attained "S" ranking, the highest level under the CASBEE Yokohama certification system.\*1 This is ORIX Real Estate's first project to receive "S" rank certification.

\*1 CASBEE Yokohama is a system designed to promote environmentally conscious buildings in Yokohama City. Under the system, building owners evaluate the environmental performance of their own properties according to the CASBEE standards. The City then conducts an independent review of the results, and provides verification to anyone who requests it. The Yokohama City Environmentally Conscious Buildings System was established in 2005 based on the Yokohama City Ordinance for the Preservation of Living Environments, Etc., and has been in place ever since.

The Minatomirai Center Building is a multi-purpose office and retail facility on a large block of the Minato Mirai district of Nishi-ku in Yokohama. Designed to enhance the level of area amenities, the development boasts high environmental and energy performance.



#### A Word From the Manager

Real Estate Investment Department  
ORIX Real Estate Corporation

Manager

**Mitsuru Yamaguchi**

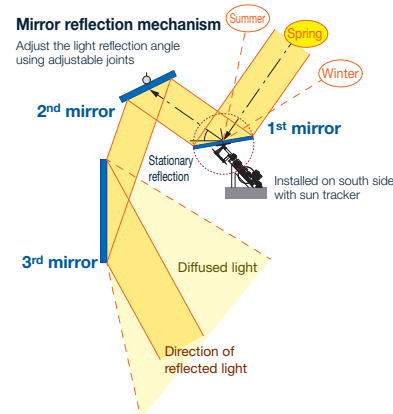
In May 2010 we will finish construction of the Minatomirai Center Building, one of the largest-scale next-generation office buildings in the Yokohama area. Not only is it environmentally friendly, but the safety of its anti-seismic vibration-damping structure and its spacious working environment have garnered high praise. Going forward, we would like to continue taking social needs and site environments into consideration and working to reduce environmental burden through our real estate development activities.

The building uses a daylighting system (T-Soleil) to guide natural light to the common spaces on office floors to reduce the amount of electricity needed for lighting. Sunlight enters through a rooftop skylight and passes through an "eco-void", a central multi-story open space, via light-concentrating devices (mirrors). In addition, a district air conditioning system has been introduced that uses energy efficiently by centralizing the creation, supply and management of hot and cold water, and steam. While abiding by the Basic Agreement on Town Development Under Minato Mirai 21, we are making use of the spacious, 9,900 m<sup>2</sup> (3,000 *tsubo*) lot to create a 2,640 m<sup>2</sup> (800 *tsubo*) Living Garden (an outdoor public area) as means of providing an open space for relaxation. The lot will also be used to help combat the "urban heat island" effect, along with durability enhancements to ensure a long useful building life.



Above: Natural light pours through the Minatomirai Center Building.

Right: The T-Soleil daylighting system



### The South Wing of Sakai Logistics Center Obtains CASBEE A-rank Certification

The South Building of Sakai Logistics Center, developed by ORIX Real Estate, is a four-story build-to-suit\*2 center on a 32,670 m<sup>2</sup> (9,900 *tsubo*) lot, providing 70,620 m<sup>2</sup> (21,400 *tsubo*) of total floor space. In part due to the strong request of the logistics companies occupying the center, it was built using recycled construction materials, and includes finely partitioned lighting control systems, among other environmentally conscious design features that earned the center an A-rank certification in its CASBEE evaluation. Given the many customers with a strong awareness of CO<sub>2</sub> emissions reductions and environmental friendliness, ORIX Real Estate has set the goal of developing environmentally conscious facilities.

\*2 A build-to-suit type center is a rental facility built and owned by a real estate company for exclusive use as a customer's logistics facility.



The South Wing of the Sakai Logistics Center



# IT and the Environment

With amendments to Japan's Law Concerning the Rational Use of Energy and local environmental ordinances, companies are rapidly being asked to address ever more energy conservation issues, including mandatory submission of CO<sub>2</sub> emissions reduction plans. Here, we introduce a number of services that use IT to reduce environmental burden.

## "Green Servicizing"

"Servicizing" means providing customers with a desired function as a service, such as renting an item out rather than selling it. "Green Servicizing" refers to forms of servicing that offer particularly outstanding environmental performance. "Green Servicizing" is expected to reduce the amount of resources and energy required for manufacturing, distribution and consumption of products, as well as to reduce unwanted property. As one of its "Green Servicizing" programs, ORIX Rentec provides an equipment rental service. By allowing customers to rent the equipment they need for only the time that they need it, this service helps reduce the use of precious resources and promotes the reuse and recycling of equipment once the returned devices are cleaned up and returned to the rental pool. Moreover, because using cargo transportation and returnable containers to deliver equipment to customers allows aggressive reduction in the amount of packaging material, this program is also expected to help reduce waste.



Cargo transport for devices

### ● Electricity Measurement Service

In collaboration with ORIX Eco Services Corporation and ORIX Facilities Corporation, ORIX Rentec provides a service that measures the annual electricity consumption of customers' cooling, heating, lighting, and IT equipment to help clarify their actual energy usage. This allows customers to make better decisions about adding new equipment and increases their understanding of operating efficiency, as well as helping them to determine the electricity savings that could be achieved by replacing existing equipment with new equipment.

### ● Responding to New Energy Markets

Global warming countermeasures have gained attention around the world. With expectations for new technologies on the rise, ORIX Rentec is working to respond to the markets for new energy, rechargeable batteries and other technologies that will be indispensable to the popularization of solar power generation and electric vehicles.

## Eco Rental

ORIX Rentec and ORIX Eco Services collaborated with Hewlett-Packard Japan, Ltd. to launch Eco Rental, a new full-support service to help customers reduce energy consumption and CO<sub>2</sub>

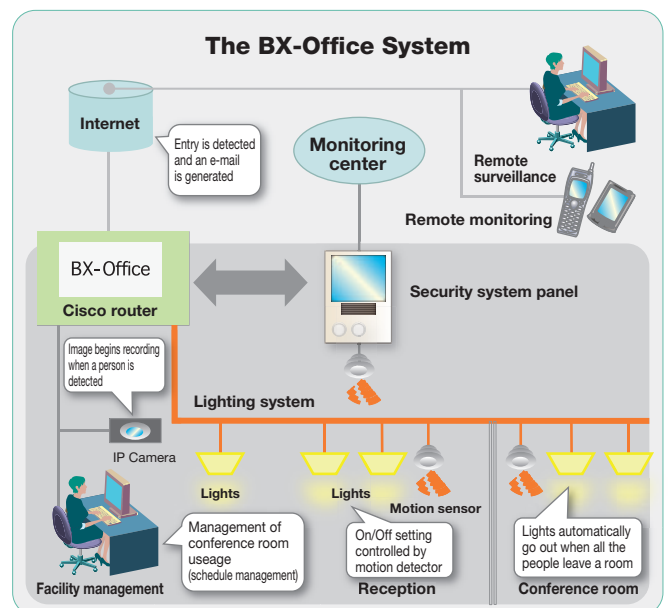
emissions from their IT systems, in May 2009. One of the Eco Rental services makes proposals for carbon offsets. In this service, ORIX Rentec bears the cost of the carbon offset used to completely balance the CO<sub>2</sub> emissions generated by the customers' servers, the first such server rental initiative in Japan.

## BX - Office

Ubiteq provides the BX-Office comprehensive gateway service for control of Internet and equipment. BX-Office links multiple office systems, such as office lighting and monitoring equipment (security facilities and systems). Equipment control linked with motion sensors and schedule management applications enables customers to limit wasteful use of air conditioning and lighting, helping to reduce CO<sub>2</sub> emissions and electricity consumption.

In addition, the graph display function makes it possible for customers to grasp their electricity consumption in real-time, contributing to enhanced awareness of energy conservation measures. Equipped with Internet connectivity functions that allow for high-level security settings, the system enables customers to operate their equipment and networks easily and at low cost, without installing multiple devices. Off-site remote control is also possible, so the system can be managed via the Internet from a computer or mobile phone.

Linking lighting control, remote video monitoring, and security systems enables strong anti-crime measures. These features allow customers to implement energy conservation and security measures simultaneously.



# One Stop Reuse and Recycling Solutions

ORIX Eco Services

ORIX Eco Services Corporation (OES) provides comprehensive and concrete one stop solutions encompassing reuse, recycling and proper waste processing, leveraging expertise in the leasing business and its own proprietary network. In the process, OES aims to drive the advancement toward a recycling-based society.

## The ORIX Group's "3R" Businesses

The concept of a "recycling-based society" is a socioeconomic goal for the 21st century. The Japanese government has enacted the Basic Law for Establishing the Recycling-Based Society (Recycling-Based Society Law) to clarify the roadmap for realizing such a society. This recycling-based society will be achieved by rigorously ensuring that people refrain from throwing away products and other goods as waste, strive as much as possible to reuse any waste generated as resources, and properly dispose of waste that is ultimately no longer useful. The "3Rs" are the common thread running through such a society. They stand for Reduce (i.e., reduce waste emissions), Reuse and Recycle. Through the "3Rs," we aim for a society that curbs the consumption of natural resources and reduces its environmental impact.

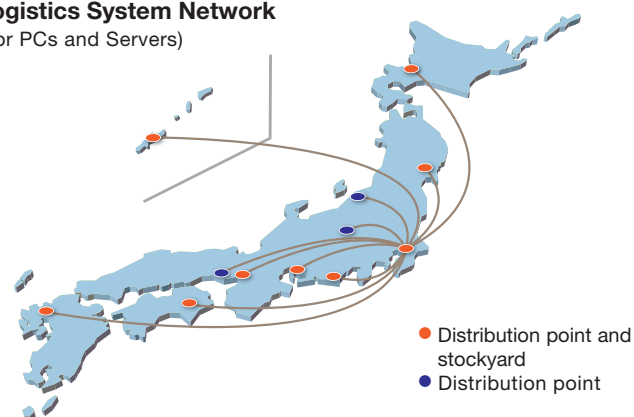
The ORIX Group is actively engaged in implementing the "3Rs" in its own operations, while providing services that help customers practice the "3Rs" as well. In particular, OES provides solutions that address issues facing customers such as the disposal of unwanted property and waste processing. Through these solutions, OES aims to reduce society's environmental impact by promoting Reuse and Recycling. These solutions take full advantage of the ORIX Group's expertise in collecting end-of-lease assets in its leasing business and its network of partnerships with companies specializing in various fields, including logistics, pre-owned equipment trading and waste processing. The solutions provided by OES form the bedrock of the ORIX Group's business activities in the area of achieving a recycling-based society. In this section, we introduce some of OES' key services based on this infrastructure.

## OES' One Stop Solutions

### ① Nationwide Collection Network

At ORIX, lease contracts for approximately 400,000 leased assets expire each year. OES is responsible for the management of these end-of-lease assets. These efforts are backed by a regionally focused, proprietary logistics system network that allows the company to efficiently collect unwanted property from customers across Japan.

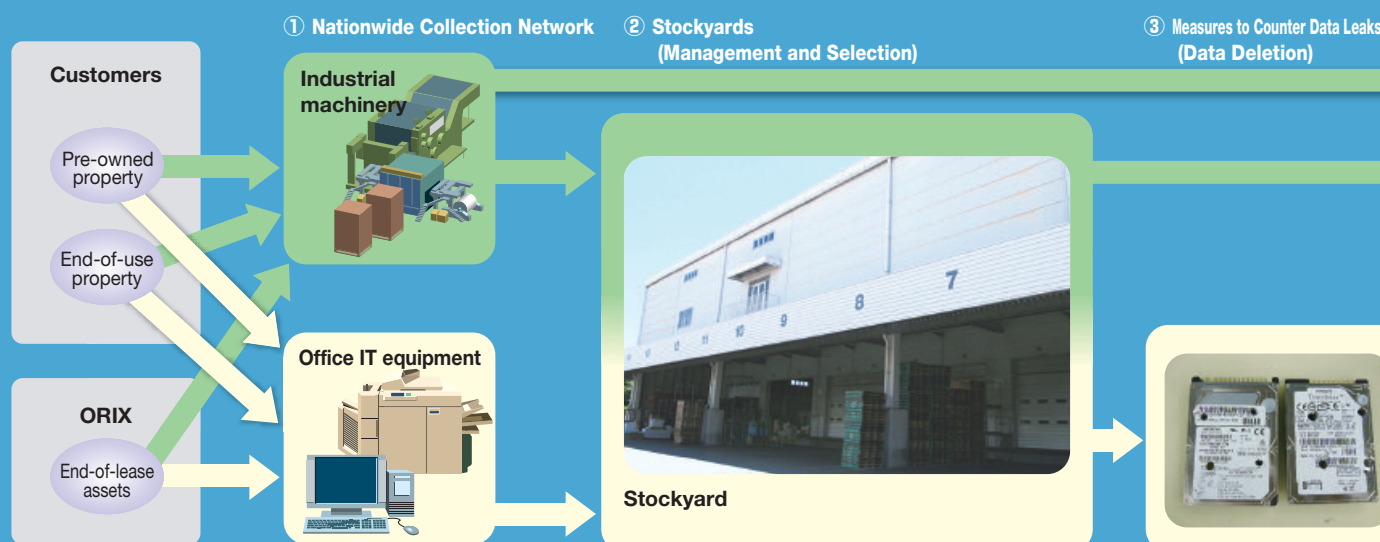
#### Logistics System Network (For PCs and Servers)



### ② Stockyards (Management and Selection)

The unwanted property that has been collected is inspected and sorted at stockyards in various locations across Japan, followed by forwarding to OES sites in Tokyo and Chiba Prefecture as necessary for management and selection. Here, OES sorts property into reusable assets and other assets.

## ORIX Eco Services' Network for Purchasing and Proper Waste Processing





### ③ Measures to Counter Data Leaks (Data Deletion)

At the request of customers, OES provides a data deletion service covering collected PCs and servers included in unwanted property aggregated at stockyards. Hard disks are removed from PCs that cannot be reused, or those in which data cannot be deleted due to malfunctions or other problems, are physically destroyed. Every precaution is taken in performing data deletion based on a data deletion system focused on information security.



Data deletion work is performed within a security system devised around an ID card-based room access control system as well as surveillance cameras.

### ④ Reuse (Resale)

OES reuses (resells) unwanted property and end-of-lease assets that are deemed to be resellable.

OES has formed a network of multiple pre-owned equipment resellers for each category of asset to ensure that assets are resold at a high price. The company can handle all manner of assets, from IT equipment to industrial machinery, office furniture and more.

### ⑤ Dismantlement and Sorting

OES has put in place a system for dismantling non-reusable assets and for sorting the parts and components of such assets to determine whether recycling is possible. This is to ensure that the company can maximize its contribution to environmentally sound material recycling. Rare metals, a resource in short supply internationally, are extractable from certain IT equipment and other assets. OES has been continuing research into efficient ways of extracting rare metals from these assets.

### ⑥ Recycling

OES selects recyclable resources with material value, and recycles them.

### ⑦ Proper Waste Processing (Disposal)

OES properly processes as waste those materials that ultimately cannot be reused or recycled.



OES regularly checks the compliance status and management condition of partner waste processors and logistics firms involved with collection and transport so that customers can confidently entrust waste processing to the company.

\* For industrial waste processing, customers are required to sign contracts with individual waste-processing OES network companies to whom industrial waste processing is entrusted, as stipulated by Japan's Waste Management and Public Cleansing Law.

### ④ Reuse (Resale)

### ⑤ Dismantlement and Sorting

### ⑥ Recycling

### ⑦ Proper Waste Processing (Disposal)



## Purchasing Unwanted Property

Disposing of idle assets, or machinery and equipment that is no longer wanted as a result of factory consolidations, closures or transfers, is complex because companies must determine the method of sale and waste processing for each of the many different types of machinery and equipment they own, and arrange the necessary procedures. In addition, risk management is also necessary to circumvent the risks associated with illegal dumping and improper export of machinery and equipment to third countries, for example.

Compounded by time and personnel constraints, the process can become extremely labor intensive. In response, OES provides a one stop unwanted property purchasing service that takes all the complexity out of the process.

OES uses its ability to discern valuable assets to deliver cost-side benefits to customers by identifying and selling valuable assets that might once have been treated as waste. Under certain circumstances, OES may also make a lump-sum purchase of all the machinery and equipment that is no longer wanted due to factory consolidations, closures, or transfers.



Removal of unwanted equipment from a factory site

## Area Recycling Systems

OES has unified its customer service desk for management operations related to waste processing, and is working to prevent improper waste processing by promoting the smooth collection of unwanted property from customers and the resale and recycling of pre-owned equipment.

The company tries as much as possible to reuse and recycle unwanted property that had once been scheduled for disposal as waste. When neither reuse nor recycling is feasible, OES provides waste processing assistance.

OES performs the complex clerical work involved in selecting a waste processor and contractual procedures, and provides other assistance as part of a one stop service for customers.

Area recycling systems are optimal for the processing of unwanted property from multiple business locations because recycling can be performed at a unified standard of quality nationwide.

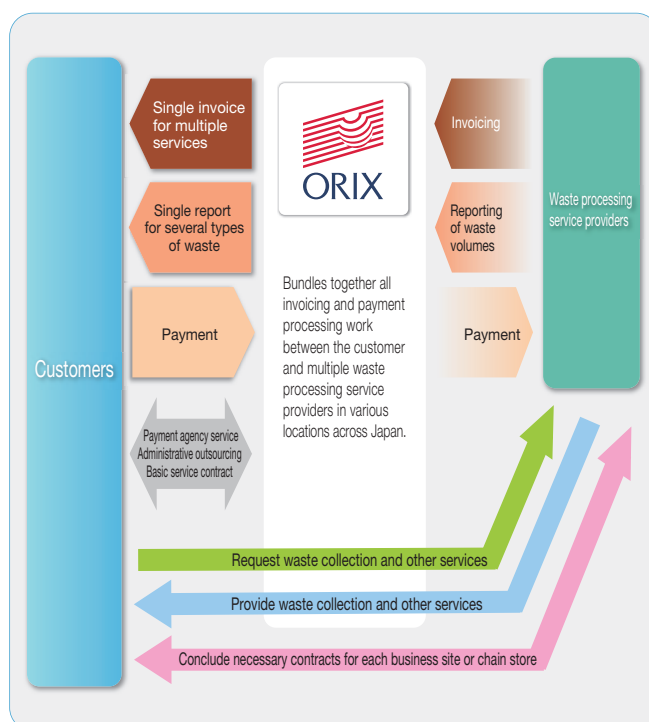


Work at an intermediate industrial waste processing facility

- Trade-in items from equipment and machinery manufacturers
- Product disposal due to expiry of best before dates or switch to new products
- Disposal of items such as signage and uniforms showing corporate logos, due to their replacement
- Disposal of printed materials showing corporate logos, such as pamphlets and manuals, due to their replacement

## Payment Agency Service

Companies operating business sites or large networks of chain stores in various locations around Japan must oversee business dealings between each business site or chain store and a variety of waste processing service providers. Invoicing and payment processing work thus increases in proportion to the number of business sites or chain stores. OES provides a payment agency service whereby the company organizes and bundles together all invoicing and payment processing dealings that customers have with multiple waste processors, irrespective of industry, business affiliation or region. Through this service, OES can substantially reduce the complex administrative workload of its customers. The company also offers support ranging from consulting on daily waste collection work to arranging services, improving operations, and making monthly payments. When invoicing customers for waste processing services OES also provides reports showing a breakdown of waste volumes by type of waste. This allows customers to clearly understand their own waste processing volumes and the related costs.



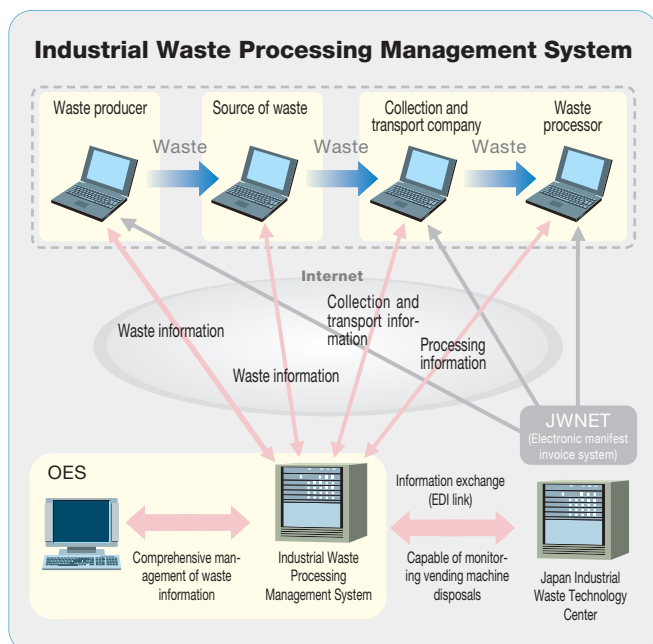


## Industrial Waste Processing Management System

Under Japan's Waste Management and Public Cleansing Law (Waste Processing Law), waste producers are required to issue manifest invoices for industrial waste in the process of releasing waste and thereby verify proper waste processing. However, waste volumes have trended at high levels and improper waste processing still remains an issue. Accordingly, effective from the fiscal year ended March 31, 2009, manifest invoice issuers are no longer exempted from their reporting obligations to local governments.

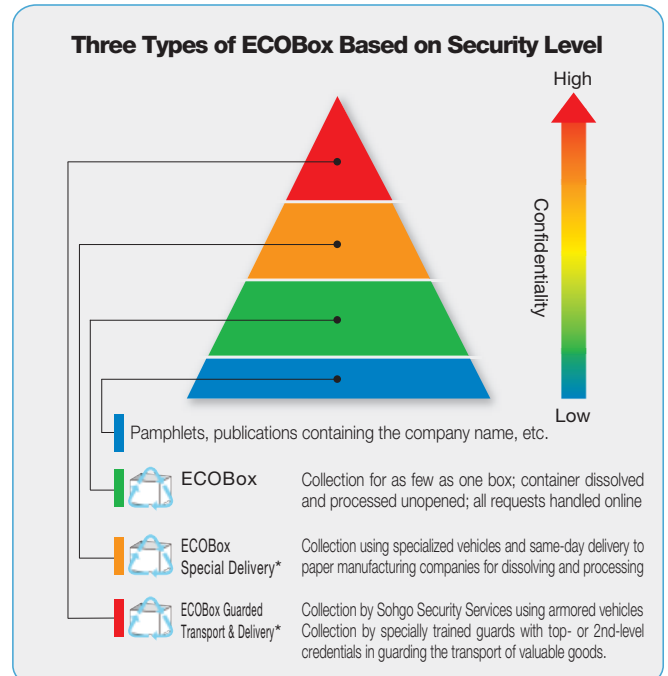
In line with this change, companies are now subject to penalties if manifest invoices are improperly administered. This naturally includes the non-issuance and falsification of manifest invoices, as well as breaches of document storage obligations. Companies are also obligated to confirm that waste processing has been completed within a certain period. A breach of this obligation may subject a company to administrative directives. In this manner, properly controlling the administration of manifest invoices and reporting on issuance status every fiscal year will place a considerable workload on companies.

In response to these issues, the Japanese government is currently working to develop electronic manifest invoices to rationalize the administration and oversight process for manifest invoices, and an increasing number of companies are joining the JWNET electronic manifest invoice system. OES' industrial waste processing management system complements JWNET with functions that address unique industry characteristics and management systems specific to individual companies. Because the information on the system is linked with JWNET, systems administration tasks are not duplicated.



## ECOBBox Important Document Disposal System

Companies must be extra careful about the management of important documents that contain confidential information. If no safeguards are put in place, companies and employees could bear significant liability in the event of an information leak. This testifies to the strict governance standards that companies must meet these days. ECOBox is a service in which unwanted important documents are collected in special cardboard boxes, and the sealed boxes are dissolved unopened along with the documents inside in a safe and secure manner. After the boxes are dissolved, the materials are fully recycled. The service is an industry first in which customers discard important documents in a special box, a partner logistics company collects as few as one box at a time, and the boxes are delivered unopened to partner paper manufacturers for dissolving and recycling. Through this service, OES helps companies implement data security measures and promote environmental protection initiatives. OES provides three types of ECOBox services to give customers options matched to the desired security level for important documents.



**ECOBox**  
重要文書処理システム

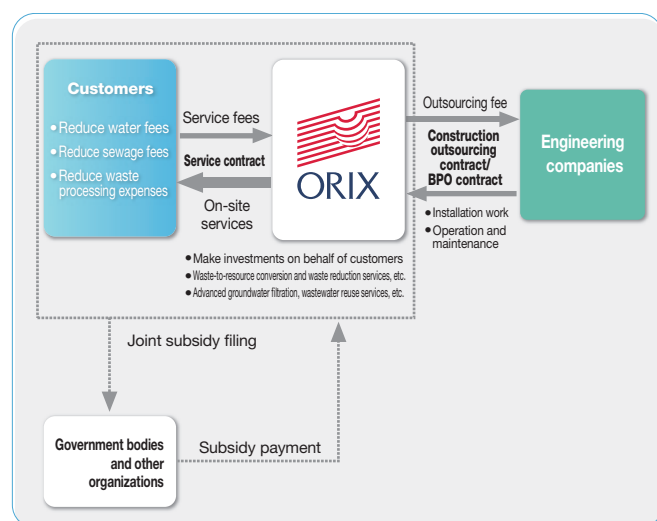
## Environmental Risk Measures and Environmental Management Support

Leveraging its expertise in the ESCO business, ORIX provides on-site waste reuse and recycling services as well as asset based lending (ABL), a new financial service utilizing moveable assets.

### On-site Services

Harnessing its expertise in the ESCO business, ORIX provides on-site services that reuse and recycle waste, including water used by customers, wastewater and waste solvents, and animal and plant residue. With on-site services, ORIX installs facilities on customer premises and uses them to provide needed services. By using ESCO arrangements, customers are able to start contributing to energy and resource conservation without any initial investment, while achieving cost reductions.

Examples of on-site services include an advanced groundwater filtration service to reduce water fees and a wastewater reuse service aimed at reducing sewage fees. Another example is a waste-to-resource conversion and waste reduction service to lower the cost of outsourcing waste processing services. In addition, on-site residue that is reusable as fuel, fertilizer and compost or in other ways is sold or brokered to users by leveraging the ORIX Group's business network. In this manner, ORIX provides a diverse spectrum of solutions. Going forward, ORIX will work to expand its businesses through partnerships with recycling companies in various locations across Japan.



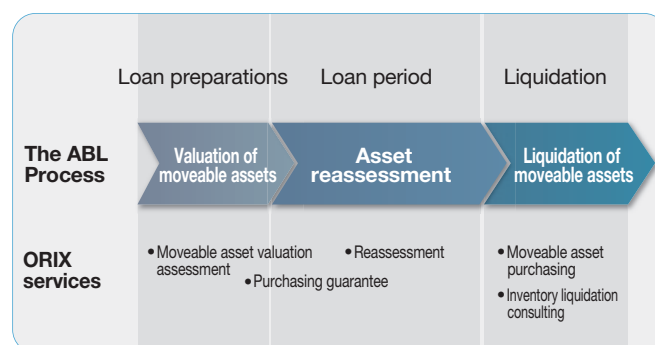
### New Financial Services Utilizing Moveable Assets

In recent years, ABL\* has drawn attention as a financing method that eliminates overdependence on real estate collateral and guarantors, and is being offered by many different financial institutions. However, ABL requires expertise specific for each lending phase, such as proper evaluation and monitoring in line with the characteristics of each moveable asset, and knowledge of liquidation procedures.

ORIX uses the expertise gained through its unwanted property purchasing business and lease property sales to provide a one stop service covering the necessary ABL-related services. Through its assessment service, ORIX provides properly computed valuations of many different assets, ranging from individual items such as machinery to pools of moveable assets such as inventories. When liquidating assets, ORIX conducts purchasing operations utilizing the hallmark strength that is its Group business network, and is involved with consulting services on the sale of moveable asset pools. Through these services, ORIX helps customers to increase the liquidation turnover for assets.

A purchasing price guarantee service is also offered in which ORIX guarantees the valuation it has computed for a fixed period of time.

\*ABL (Asset Based Lending): Please see the glossary on page 9.



### Land Solutions

One method of soil decontamination that is currently fairly common in Japan is to dig up contaminated soil and transport it to a disposal site, and bring clean soil to the original site to replace the removed soil. However, the process is costly because of the transportation and replacement soil required. Besides concerns about the spread of soil contaminants into the environment during the digging and transport process, observers have pointed out that the method does not provide a fundamental solution to cleaning up the contaminated soil. In addition, the excessive practice of digging and removing contaminated soil, and the potential spread of contaminants into the environment as a result of the improper processing of contaminated soil have been addressed as problems in partial amendments to Japan's Soil Contamination Countermeasures Act. As a result, over the past few years, methods of cleansing the soil at the original site without transporting it elsewhere have been attracting attention.

As part of its environmental solutions, ORIX Eco Services introduces to customers technologies for cleansing soil at the contamination site without transporting any soil, and land solutions designed to remediate contaminated soil in a short period at low cost.



# Proper Waste Processing

ORIX Environmental Resources Management

Funabashi Eco Services

Through the operation of facilities that properly and correctly process waste produced by customers, ORIX Environmental Resources Management Corporation and Funabashi Eco Services Corporation provide a network of waste collection and transport firms and intermediate waste processors with the aim of helping to protect the environment in the Tokyo metropolitan area.

## Operating Proper, Sophisticated Waste Processing Facilities

ORIX Environmental Resources Management operates the core zero-emission plant at the Sai-no-kuni Resources Recycling Facility in Yorii-cho, Saitama Prefecture through a PFI partnership. Utilizing the latest thermal decomposition and gasification methods, the plant recycles waste without releasing any incinerator soot or airborne ash whatsoever. In addition to industrial waste from factories and offices, the plant provides waste processing services for many local governments. The plant processes 450 tons of waste daily, one of the largest processing volumes among private-sector facilities in Japan. The facility's defining feature is that it processes the waste it receives at roughly 2,000°C, enabling almost all of the waste to be recycled. ORIX Environmental Resources Management has voluntarily set dioxin limits for the site at one-tenth the legal limit. In this way, the facility was designed with the surrounding environment in mind. The plant is in compliance with various recycling laws, and has been certified by government institutions as a recycling facility for auto shredder dust under the Law Concerning Recycling Measures for End-of-life Vehicles, and as a producer of products recycled from plastic containers and packaging under the Law for Promotion of Sorted Collection and Recycling of Containers and Packaging.



ORIX Environmental Resources Management

## Operating an Intermediate Processing Facility for Industrial Waste From Construction Sites

Funabashi Eco Services is a general waste processing firm providing integrated services ranging from waste collection and transport, selection of waste for pulverization, and waste incineration. The company joined the ORIX Group in March 2008 following the transfer of all of its issued shares. Waste brought into the company is carefully selected for either recycling or incineration. Metal, wood and paper scrap is fully recycled while all other materials are incinerated. The incinerator ash is also recycled into construction materials. The facility can also process CFCs, which have a greenhouse gas effect that is thousands of times more potent than that of CO<sub>2</sub>. Taking full advantage of its extensive expertise and proximity to the Tokyo metropolitan area, Funabashi Eco Services is working to satisfy customer needs for improving recycling efficiency, while rigorously enforcing compliance. In the collection of construction waste, a key strength of the company, Funabashi Eco Services will step up partnerships with the ORIX Group's real estate-related businesses and ORIX Environmental Resources Management.



Funabashi Eco Services



## Example of Service Provided to Customer

The multi-regional industrial waste certification system<sup>\*1</sup> allows companies to transport and process industrial waste that can be recycled into useful materials across administrative boundaries without requiring industrial waste processing business permits from each local government. The system thus grants exemptions to Japan's Waste Disposal and Public Cleansing Law. Customers have applauded our track record in utilizing this system, the processing capabilities of our plant and other aspects of our operations.

<sup>\*1</sup> Under the multi-regional industrial waste certification system, companies must submit a pledge to the Ministry of the Environment to bear responsibility in the event of misconduct by their respective waste processing contractors.

### Customer Feedback

#### Sekisui House, Ltd.

Project Manager  
Resource Recycling Center  
Engineering Section, Kanto Plant

#### Susumu Tanaka

Sekisui House launched a zero emissions plan in 2000 as part of efforts to help achieve a sustainable society and mitigate global warming. The company obtained multi-regional certification, and has achieved zero emissions status in production divisions, new construction sites, after-sales and maintenance divisions, and remodeling sites. In the process, we needed to find a contractor that could properly process difficult-to-recycle waste, which accounts for around 3% of our total waste. We began and have continued doing business with ORIX Environmental Resources Management because of our confidence in its advanced waste processing methods.



### A Word From the Manager

Sales Section, Sales Department  
ORIX Environmental Resources  
Management Corporation

#### Tomoya Urushihara

ORIX Environmental Resources Management harnesses its advanced waste processing capabilities to accept and recycle waste that is difficult to process at other facilities. Sekisui House expressed strong support for the zero emissions status of our facility. Going forward, we are determined to maintain proper and correct waste processing operations so that we can meet the expectations of our customers using the facility.

## The ORIX Group's Environmental Initiatives

Ever since ORIX Real Estate Corporation (ORE) launched environmental preservation activities in 2008, ORIX Golf Management Corporation, ORIX Baseball Club Co., Ltd., and a host of other ORIX Group companies have followed suit with a variety of environmental initiatives.

### Project to Save the Coral Reefs of Okinawa

ORE launched a project to save the coral reefs of Okinawa in 2008, which was designated as the International Year of the Reef. At present, the project is planting coral off the shores of Nakijin Village, Okinawa. In partnership with OKIDEN KAIHATSU CO., a member of the Okinawa Electric Power Company Group, ORE is continuing its coral reef preservation and restoration activities, including surveys to monitor and confirm the growth of coral reefs. Customers of ORIX's Okinawa Branch Office are also helping with the transplantation of coral, making this project one that is conducted in close cooperation with the local community.



Coral planting

### Golf Course Activities to Save Coral Reefs

ORIX Golf Management collects unwanted golf balls and lost balls and donates the proceeds from the sale of these balls for the coral planting activities, thereby helping to restore coral reefs. Originally begun in Okinawa, this initiative was extended nationwide in 2009 to all 36 golf courses and 2 practice facilities managed by the company.

The two courses managed in Okinawa began collecting balls in 2008 and with the help of customers had raised ¥40,772 and collected 12,859 lost balls as of March 31, 2009. Proceeds from activities in 2008 have funded the transplantation of 200 coral seedlings. Together with ORE's coral reef preservation projects, our aim at ORIX Golf Management is to help transplant a total of 10,000 coral seedlings over the next 5 years.



Golf ball collection box



Donation box for the project to save the coral reefs of Okinawa

### Mangrove Planting

In February 2009, six members of the ORIX Buffaloes professional baseball team and children from Miyakojima in Okinawa Prefecture, Japan, planted mangroves at the Kawamitsu Mangrove Park on Miyakojima. This was part of the Miyakojima Eco-Heart Joint Project, an environmental protection initiative being jointly run by the ORIX Buffaloes and local government. The ORIX Buffaloes uses Miyakojima as the location for its off-season training camp and is participating in the project to give back to the local community.



ORIX Buffaloes players and Miyakojima children plant mangroves

### Turning Old Uniforms and Team Banners Into Eco-Friendly Reusable Bags

ORIX Buffaloes has become the first of Japan's 12 professional baseball teams to use old team banners and uniforms into eco-friendly reusable bags. This is a joint undertaking with the Osaka branch of Vantan Design Institute, a design school. Approximately 100 old uniforms and 30 banners have been turned into eco-friendly reusable bags. The proceeds from the sale of these bags will be used for elementary school tree-planting activities (laurel trees; a symbol of victory), which ORIX Buffaloes players plan to take part in with pupils during the professional league off-season.

This project is called the ORIX Buffaloes Mawaru Project and is designed to inspire children to think about the environment. The planted trees will become symbols for the schools and will absorb CO<sub>2</sub> as they grow, hopefully for many years.



Eco-friendly reusable bags made from old team banners and uniforms.



# Preserving Biodiversity

Enoshima Aquarium PFI

ORIX Real Estate

Companies have a major impact on ecosystems but also benefit from healthy ecosystems. As an operator of an aquarium and a real estate business, the ORIX Group has a responsibility to help society harmonize with nature, and is therefore actively conducting biodiversity preservation initiatives.

## Enoshima Aquarium, An Edutainment-Type Aquarium

Enoshima Aquarium\*<sup>1</sup> opened in April 2004 in Fujisawa City, Kanagawa Prefecture. The aquarium boasts an idyllic location facing Sagami Bay, flanked on one side by Mt. Fuji and on the other side by the scenic Enoshima area. It is home to some 41,451 creatures representing 759 species (as of December 31, 2008) of marine life. Visitors can not only view the living creatures and specimens, but can also have fun at this edutainment-type\*<sup>2</sup> aquarium learning about marine organisms and Sagami Bay and the Pacific Ocean, which are a treasure trove of sea life.

\*1 Enoshima Aquarium is a joint project of the ORIX Group, Enoshima Marine, and other companies.

\*2 Edutainment is a combination of "education" and "entertainment." It has become a popular expression in recent years for learning while having fun at museum, art galleries and the like.

Enoshima Aquarium has been lauded for its high customer satisfaction and proactive communication activities and was selected as a recipient in the Sixth Japan 300 High-Service Awards\*<sup>3</sup>.

\*3 The Japan 300 High-Service Awards is sponsored by Service Productivity & Innovation for Growth (SPRING) and recognizes and disseminates cutting-edge best practices that can help the service industry as a whole to innovate and improve productivity. The awards are designed to inspire companies to strive to provide services of an even higher quality.

The fiscal 2009 theme at the aquarium is "Irreplaceable Life". The aquarium has launched "Enosui ECO" to celebrate its fifth anniversary year as an aquarium that protects the environment and fosters life. "Enosui ECO" has two components: ecology, and environmental activities and initiatives. The aquarium is determined to continue advancing activities that help preserve biodiversity.



Enoshima Aquarium

### ● The Environment Aquarium Undergoes Refurbishment

The Environment Aquarium was refurbished in April 2009, marking its fifth year, and now uses LED lights that consume less electricity-150 W compared with 1 kW before. This represents a groundbreaking initiative, with no precedent for using LED lights as the main lighting in an aquarium of this size with a 3.4 ton

water capacity. This aquarium is a showcase for the Enosui ECO message and also highlights the beauty of life which one feels strongly from the collection of small life on display.



Environment Aquarium

### ● Monthly Beach Clean-up Activities

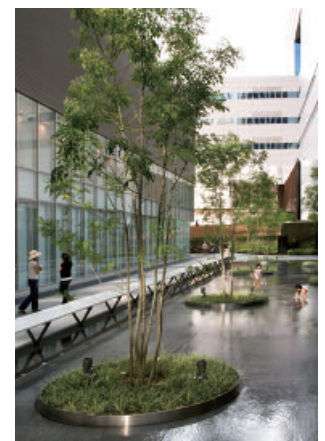
We have been conducting monthly beach clean-up activities at Katase Kaigan Nishihama beach and other locations for more than a year with the cooperation of Kanagawa Coastal Environmental Foundation and other parties. Under the slogan "Let's keep coastal areas clean and free of rubbish!", we give lectures on the problem of coastal rubbish and organize beach-combing activities.



Beach clean-up in progress

## Hotarumachi, A Future Symbol of Osaka and Its Water Environment

ORE is participating in the Aquapolis Osaka Alpha Project, a redevelopment project nicknamed the Hotarumachi district. This urban redevelopment project aims to create a new district that will become a symbol of a reanimated Osaka and is themed on the city's waterways. In Hotarumachi, there is an urban water space that demonstrates the beneficial evaporative cooling effect that water has on cities. The project has developed water spaces that let natural light and wind grace urban settings.



An urban water space

# ORIX Group Environmental Activities

## Environmental Policy and Activity Report

The ORIX Group is promoting ECORIX2012, an environmental policy that will guide its efforts through the year ending March 2012.

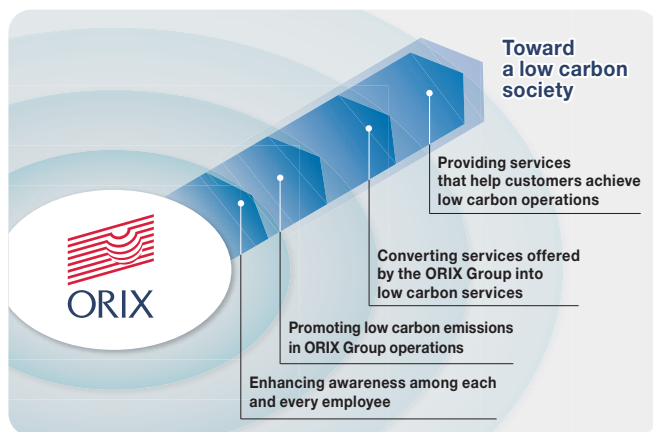
### ORIX Group Environmental Policy (Drafted September 25, 2008)

For the sake of our newest stakeholders, that means future generations, we aim to become a corporate group that encourages greater carbon efficiency by:

- Contributing to the emergence of a low carbon society
- Supporting customers achieve low carbon operations
- Promoting initiatives to lower our own carbon emissions

ORIX Group COO 梁瀬行雄

### ECORIX 2012 Action Targets



#### Contributing to the emergence of a low carbon society

- As members of society, each ORIX Group employee takes every available opportunity to reduce environmental impact.

##### [Aims for March 2012]

- Strive to develop new services for helping customers achieve low carbon operations
- Raise environmental awareness and knowledge among employees through environmental seminars and other training courses
- Actively take part in activities that promote low carbon households and communities

#### Helping customers achieve low carbon operations

- We support efforts by customers to reduce their environmental impact and achieve low carbon operations through ORIX Group services and products.

##### [Aims for March 2012]

- Provide customers with CO<sub>2</sub> emissions data pertaining to services and products to the maximum extent possible
- Provide information on the effectiveness of services and product usage in reducing CO<sub>2</sub> emissions

#### Promoting initiatives to lower our own carbon footprint

- We are taking steps to reduce carbon dioxide generated by ORIX Group activities in order to achieve low carbon operations.

##### [Aims for March 2012]

- Reduce CO<sub>2</sub> emissions from ORIX Group business operations and business activities by 10% compared to the fiscal year ended March 31, 2008
- Establish targets and promote activities tailored to each division (Promote activities in line with voluntary action plans in related industries where available)
- Reduce paper usage by 30% compared to the fiscal year ended March 31, 2008

### Activities in the March 2009 Fiscal Year

The following activities were conducted during the fiscal year ended March 31, 2009 in the approximate six-month period after the environmental policy was drafted in September 2008. Activities focused on grasping the current state of affairs.

#### ● Assessing the Relationship With the Environment and Environmental Burden of Each Group Company

- Identified important relationships with the environment in each ORIX Group company's business activities.
- Identified positive and negative environmental aspects of each division's business operations and services, and recognized, assessed and controlled areas of environmental risk (laws and regulations).
- Identified and calculated the environmental impact of each division, including in terms of CO<sub>2</sub> emissions from the use of electricity and other energy sources, paper, rubbish and water, etc.

#### ● Reduced CO<sub>2</sub> Emissions in Business Operations

In order to reduce our own carbon footprint, we established a system for collating data on energy use based on actual energy use in each of the Group's fields identified through ECORIX2012 activities. We are also trying new things, such as making reductions visible through comparisons with historical data on an individual company or business site basis.

#### ● ECORIX Promotion Committee

We established the ECORIX Promotion Committee in order to promote ECORIX2012 activities and coordinate efforts through information sharing. The Committee is made up of environmental officers selected from ORIX Group companies and divisions. It met twice in the March 2009 fiscal year: November 2008 and February 2009.

### Activities in the March 2010 Fiscal Year

ORIX will conduct the following activities in the fiscal year ending March 31, 2010.

#### ● Survey Environmental Load and Respond to the Amended Law Concerning the Rational Use of Energy

Following amendments to the Law Concerning the Rational Use of Energy, we must assess energy usage at each location for every ORIX Group company. Using an energy use data collation system, we are assessing CO<sub>2</sub> emissions for each business division (office and store) and have begun activities to reduce these emissions at individual companies and business sites. We are also surveying other environmental impacts.

#### ● Establish Action Targets

In the previous fiscal year, ORIX assessed the relationship with the environment of each company as well as environmental burden. We will use this information to set targets at the company and division level and to promote activities.

#### ● Strengthen Legal Compliance

We will strengthen systems for ensuring compliance with environmental laws and regulations in the ORIX Group's various business fields.



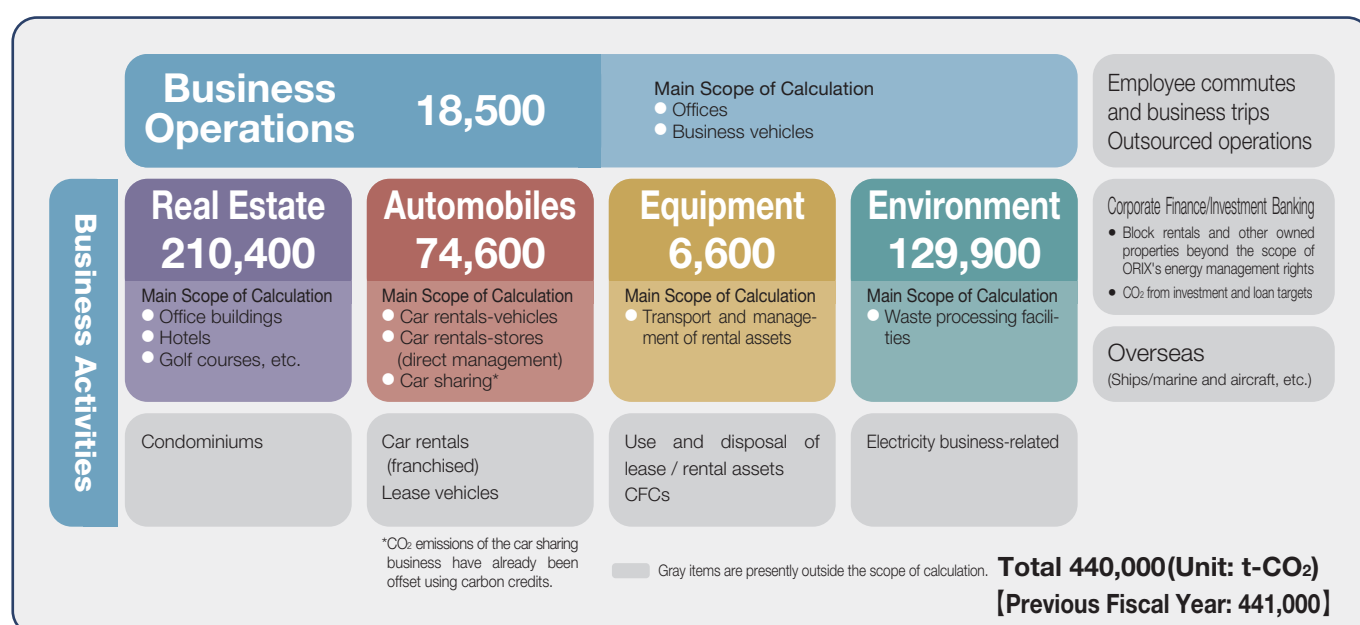
# Carbon Disclosure

ORIX ascertains CO<sub>2</sub> emissions in each of its diverse business fields, which extend from financial services to real estate businesses, automobile leasing and rentals, and the operation of waste processing facilities. This data is disclosed as "carbon data."

## CO<sub>2</sub> Emissions

In order to achieve low carbon operations, the ORIX Group assesses and strives to reduce CO<sub>2</sub> emissions from not only its operations, but also the products and services it offers. CO<sub>2</sub> emissions from the use of services often varies according to the customer's operations, but we still work to assess these levels to the extent possible.

For the fiscal year ended March 31, 2009, we have disclosed data covering the scope outlined below. Going forward, we intend to expand the scope of calculation and enhance its precision. Calculated results will help to prioritize activities in those fields that have the greatest impact and those where reduction efforts will be most effective.



### [Scope of Calculation for March 2009 Fiscal Year]

- Business operations: Emissions from business operations of 110 business sites (previous fiscal year: 62 sites) for which energy-use data could be obtained from the ORIX Group's business sites, and emissions from operation of 1,804 business vehicles (previous fiscal year: 1,944 vehicles) used by Group employees
- Real estate: Emissions from 180 (previous fiscal year: 120) buildings and facilities such as office buildings, golf courses, hotels and seminar facilities, sports stadiums, and an aquarium, including tenanted properties, owned and operated in the real estate business (Excludes properties where the tenant has all the energy management rights)
- Automobiles: Emissions from the use of rental cars at directly managed stores and emissions from business operations of 112 directly managed stores (previous fiscal year outside scope of calculation). CO<sub>2</sub> emissions of 252 t-CO<sub>2</sub> from the use of car sharing have already been offset using carbon credits.
- Equipment: Emissions from the transport of rental equipment at ORIX Rentec (previous fiscal year outside scope of calculation), and emissions from electricity consumption, etc. at two ORIX Rentec Technology Centers.
- Environment: Emissions from waste processing facilities (2 locations)

### [Calculation Method]

- CO<sub>2</sub> emissions from energy use are calculated by multiplying energy consumption by the emissions coefficients of general electricity utilities and specified-scale electricity utilities published by the government of Japan (emission coefficients by electricity utility). However, if coefficients are unavailable, CO<sub>2</sub> emissions from energy use are calculated by multiplying energy consumption by the default values of emissions coefficients stipulated by the "Ministerial Ordinance on Calculation of Greenhouse Gas Emissions by Specified Emitters." This was the case in the previous fiscal year.
- CO<sub>2</sub> emissions from non-energy use and emissions of other greenhouse gases are calculated by multiplying coefficients from the aforementioned ordinance by the equivalent amount of CO<sub>2</sub> emissions.

## Participation in Domestic Emissions Trading System

ORIX is participating as a target participant in the trial implementation of an integrated domestic market for emissions trading by the Japanese government (Domestic Emissions Trading System). ORIX has set the goal of reducing CO<sub>2</sub> emissions from electricity use per floor area in the ORIX Head Office building, with reference to ECORIX2012 by 10% by the fiscal year ended March 31, 2013 compared with the fiscal year ended March 31, 2008. CO<sub>2</sub> emissions for the past three years are shown in the table to the right.

### CO<sub>2</sub> Emissions From Head Office Electricity Consumption (part of Mita NN Building: 4-1-23 Shiba, Minato-ku, Tokyo)

Year ended March 31, 2009	42.5 kg-CO <sub>2</sub> /m <sup>2</sup>
Year ended March 31, 2008	34.6 kg-CO <sub>2</sub> /m <sup>2</sup>
Year ended March 31, 2007	41.0 kg-CO <sub>2</sub> /m <sup>2</sup>

### [Calculation method]

Calculated by multiplying the electricity consumed by the emissions coefficients of Tokyo Electric Power Company, Inc. (TEPCO).

# ORIX Group Environmental Management System

The ORIX Group is building an environmental management system (EMS) based on international standards and conducting sound environmental management through its continuous operation. ISO 14001 certification has been obtained by ORIX Group companies with an especially close connection with the environment.

## ISO Certification Status

The following four ORIX Group companies have obtained ISO 14001 EMS certification as a framework for promoting environmental activities.

<b>ORIX Rentec Corporation</b>	Acquired 2000
<b>ORIX Interior Corporation</b>	Acquired 2003
<b>ORIX Eco Services Corporation</b>	Acquired 2006
<b>ORIX Environmental Resources Management Corporation</b>	Acquired January 29, 2009 <b>NEW</b>

## ORIX Environmental Resources Management's EMS

ORIX Environmental Resources Management became the latest ORIX Group company to acquire ISO 14001 certification in January 2009. It is using ISO 14001 as a framework for building an EMS and applying it to all plant operations, as well as receiving third-party evaluations. This should enable the company to pre-empt environmental risk and respond quickly to any environmental problems.



### ① Plant Environmental Audits

The company has established an Environmental Management Committee with the aim of auditing plant environmental management. This committee is made up of the president, who is chairperson, and divisional managers and above. The committee discusses environmental audit reports and improvement measures. Audits are performed by people with no organizational ties to a plant and cover a plant's entire operations. Audit reports are made directly to the Environmental Management Committee once a month.

The aims of the audits are to ensure legal compliance and prevent environmental pollution. To this end, checks are made of environmental analysis and measurement frequency, information disclosure and plant cleanliness and orderliness.

### ② Strengthening Plant EMS

The company has appointed a dedicated environmental management officer to strengthen plant EMS. This officer conducts daily environmental inspection rounds within plants and instructs workers on work practices, cleaning and other relevant matters if problems are found. This officer is also responsible for providing the training and preparing the standards needed to prevent and remedy problems and make improvements.

## Internal and External Communication

The ORIX Group uses various means of communication to disseminate and discuss environmental information with stakeholders inside and outside the group.

One of the action targets of our environmental policy is "Contributing to the emergence of a low carbon society." As members of society, ORIX Group employees actively conduct activities to reduce environmental impact at every opportunity. Training and workshops are one means of achieving our action target. Furthermore, we distribute environmental information in our in-house online news site once a week to raise employee environmental awareness.

### ● Internal Communication

- Open seminars within the ORIX Group
- Environment workshops at each group company
- Environmental Report reading sessions



An Environmental Report reading session

- Our in-house online news site Journal Online carries environmental information



Journal Online

### ● External Communication

- Provision of environmental information by e-mail to customers
- Provision of environmental information to biz.ORIX, an ORIX business information site



<http://biz.orix.co.jp/>



### The following is an independent review of the quality and content of the information presented in this report.

2009 will probably be remembered as the year when the Japanese government signaled to the world its political will to shift from a low carbon society to a decarbonized society by slashing greenhouse gases over the medium and long terms. In the process, the socio-economic paradigm of mass production and mass disposal will need to be changed. Balancing both environmental and economic considerations will require the direct provision of various services without transferring the ownership of property to customers. As a provider of carbon offset services, ESCO businesses, car sharing operations, and leasing businesses, the ORIX Group is at the vanguard of this drive.

The ORIX Group's latest environmental report demonstrates an awareness of this point, with the ORIX Group positioning itself as an eco services integrator. The Group's businesses are organized under three key themes for a sustainable society: a low carbon society, a recycle-based society, and a symbiotic society. The report has become much easier to understand as a result. Furthermore, compared to the previous report, this report explains in more simple terms the companies that belong to the ORIX Group and the businesses that they conduct. Other noteworthy developments since last year include ORIX Environmental Resources Management obtaining ISO 14001 certification. This development is significant because of the potential large environmental risks associated with this company's waste processing activities.

On the other hand, however, the report does not discuss the degree of achievement of targets for the fiscal year ended March 31, 2009. ORIX has set targets for the fiscal year ending March 31, 2010 and a concrete explanation of the degree of achievement against each target would be desirable. I also hope that ORIX will provide specific details about the status and operation of the environmental management system of Funabashi Eco Services, which runs a waste processing business.



Professor, Faculty of Law and Economics, Chiba University

**Hidefumi Kurasaka**

## CPO Message



ORIX Group CPO (Climate Protection Officer)  
President, ORIX Eco Services Corporation  
Energy and Eco Services Business  
Headquarters, ORIX Corporation  
Domestic Sales Administrative Headquarters,  
ORIX Corporation  
Managing Director, ORIX Corporation

**Shinichi Obara**

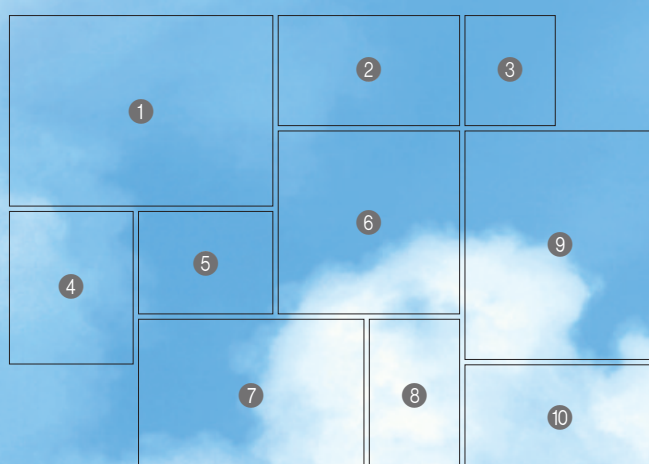
During 2009, Japan pledged on the world stage to cut its total greenhouse gas emissions by 25% by 2020, compared to 1990. It was thus a momentous year for the environment that heralded the beginning of a movement to incorporate environmental priorities into the economy and an end to treating the environment as an externality.

Japan has long led the world in the areas of environmental technologies and products. But in order for Japan to live up to its pledge to the international community, it must optimally combine these technologies and products to develop businesses around eco services.

We want the ORIX Group to take the lead in developing an eco services business model, in which the Group acts as the principal in businesses that provide customers with environmentally beneficial services. The ORIX Group has catered to customers' needs with services centered on finance. In recent years, ORIX has been boldly developing "Finance + Services/Businesses" operations that integrate finance capabilities with services and businesses, and within this has focused on the environmental field for more than a decade. Looking at the business fields that are being developed as a platform for the delivery of eco services, namely, housing, automobiles and IT, I believe that the ORIX Group is well positioned to develop a unique presence as an eco services integrator.

By harnessing the Group's wisdom with an eye on the future, we are determined to make an even greater contribution to the creation of a low carbon society by lowering our own carbon footprint and through the provision of products and services to customers. After all, these goals are incorporated in ECORIX2012.

## 【Cover Photographs】



## Photographer

① ORIX Corporation	Hiroaki Nishina
② ORIX Kitakanto Corporation	Masako Tsunoda
③ ORIX Corporation	Tomoko Yamaguchi
④ ORIX Corporation	Nagaaki Esaki
⑤ ORIX Auto Corporation	Masaya Kishida
⑥ ORIX Corporation	Yasuki Shintani
⑦ ORIX Trust and Banking Corporation	Kimiko Yoshida
⑧ ORIX Callcenter Corporation	Kaori Sasaki
⑨ ORIX Corporation	Keigo Wada
⑩ ORIX Rentec Corporation	Satoshi Horino

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Agatsuma Bio Power	Page 13	+81-27-260-9332 (Switchboard)
Business Management Department (ORIX)	Page 14	+81-3-6667-2296 (Department direct line)
ORIX Eco Services	Pages 14, 19, 20, 21, 22, 23 and 24	+81-3-6667-2300 (Switchboard)
ORIX Auto	Pages 16 and 17	+81-3-6436-6000 (Switchboard)
ORIX Real Estate	Page 18	+81-3-3435-3411 (Office of the President)
ORIX Rentec	Page 19	+81-3-3473-7561 (Switchboard)
Ubiteq (IRI Group)	Page 19	+81-3-5487-5560 (Switchboard)
ORIX Environmental Resources Management	Page 25	+81-3-6667-2280 (Switchboard)
Funabashi Eco Services	Page 25	+81-47-432-6711 (Switchboard)
Domestic ORIX Corporation business locations	<a href="http://www.orix.co.jp/grp/cnt/eigyo.htm">http://www.orix.co.jp/grp/cnt/eigyo.htm</a>	



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チーム・マイナス6% [www.team-6.jp](http://www.team-6.jp)