

Ricoh Eco Business Development Center Opens

With the aim of creating and expanding business based on environmental sustainability
– part of a project commemorating the company's 80th anniversary

TOKYO, April 15, 2016 — The "Ricoh Eco Business Development Center", established by Ricoh Company, Ltd. (President, Corporate Executive Officer: Zenji Miura) with the aim of creating and expanding new businesses based on environmental sustainability, opens today, April 15. Since the 1990s, Ricoh has focused its efforts on "environmental management" to simultaneously reduce environmental impact and create additional sources of revenue & profit. At the start, the company set mid-term and long-term targets for 2020 and 2050 to reduce its impact on the environment. The company continues to actively work to reduce the environmental impact of its business activities. It also aggressively promotes saving energy and other resources where their products are used. Ricoh will further evolve the scope of this "environmental management" and aim to create eco-businesses in a broader range of fields, not limited to the domains it has focused on in the past. This will further evolve with customers, which will contribute to achieving a more sustainable society.

The "Ricoh Eco Business Development Center" was founded as a project to commemorate the company's 80th anniversary. This center has three major functions: the "Reuse & Recycling Center", which started operation in May last year; "a center for verification of eco-business technologies", which is already in operation; and a "source to distribute information regarding eco-business activities". It aims at creating and expanding eco-business towards achieving "eco-management that evolves with customers". The Ricoh Group targets eco-business revenues of 100 billion yen in fiscal year 2020.

The center for verification of eco-business technologies

This center will start verification trials aimed at saving resources and creating energy, adhering to energy circulation, and as "the center for verification of eco-business technologies". The target is to create new eco-businesses e.g. technology to tap-off energy from untapped natural resources, such as waste plastic and timber from forest thinning, or power-generating technology using a small water supply. Beyond this, it will promote its approach to saving energy through advanced technology with experiments that include operating automated guided vehicles using a new style secondary cell, which allows rapid charge and discharge, or researching plant cultivation technology. Positive people-to-people exchanges will be held on the basis of the 'open innovation concept' of collaboration between industry, academia and government. Trials on individual themes have already started by fostering collaboration between numbers of diverse parties. From now, with the opening of this center, each theme will progress to the verification trial stage. The company

has participated in the "Gotemba eco-city plan" regional regeneration project and the "Model forest venture" to preserve afforested areas of Gotemba. Trials of eco-business development with other local areas have also started.

To commercialize, we must first organize the development and utilization system of eco-business technology in this center. Next, the center must contribute to activating the regional economy and circulating local resources through verification experiments involving the region. Further, we aim to deploy new eco-business in and outside the country, using eco-business technology and the systems acquired through these experiments.

Reuse & Recycling Center

The "Reuse & Recycling Center," which created a new role for this facility, started operation in May last year and is rebuilding about 20,000 MFPs per year. The reuse & recycling function of OA equipment, which was previously conducted in 12 sites across the country, has now been integrated into three locations, with this center serving as the principal location. We will further develop the reuse & recycling technology cultivated so far, and at the same time strengthen its core activities, by expanding the number of target products and ranges. All of these activities play a vital part in the Ricoh Group's eco-business.

Source to distribute information about eco-business activities

This center distributes information on eco-business activities, eco-business-friendly products and services of the Ricoh Group, and new eco-business technologies. The center also actively develops activities that contribute to regional communities, such as environmental education.

<Outline of Ricoh Eco Business Development Center>

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| 1. Location: | 1-10 Komakado, Gotemba-city, Shizuoka-prefecture |
| 2. Site area: | 101,203 m ² |
| 3. Building area: | 71,074 m ² |
| 4. Business outline: | Business development through empirical study and practice |
| 5. Number of employees: | 900 |
| 6. Functions: | Center for verification of eco-business technologies,
Reuse & Recycling Center,
Source to distribute information regarding eco-business activities |

<Activities undertaken at the Ricoh Eco-Business Development Center>

◆Resource Conservation:

- (1) Oil recovery from waste plastic:
Generation/extraction of valuable materials, such as oil and metals from used plastics
- (2) Hydrogen production from untapped natural resources:
Production of hydrogen from waste plastics or woody biomass, by thermal cracking
- (3) Optimization of recovery logistics:
Greatly increase efficiency of the cycloid type supply chain used in the recovery of used OA equipment

◆Energy creation :

- (4) Utilization of woody biomass:
Local production for local consumption model covering everything from trimming timber resulting from forest-thinning to the practical use of energy
- (5) Micro-hydropower-generation
Power generation system using a small water supply, available in- or outdoors
- (6) Power generation element in indoor-light environment
The perfect solid type solar cell with high generating capacity under indoor-light environment

◆Energy-conservation

- (7) Dual ion secondary cell/automatic guided vehicle:
Secondary cell capable of rapid charge and discharge (Operation experiment loaded on automatic guided vehicles)
- (8) Machine vision system (electromobile):
Application of machine vision technology to automate driving
- (9) Machine vision system (Drone):
Application of machine vision technology to automate flight control, in a non-GPS environment
- (10) Plant cultivation technology:
To develop a new plant cultivation technology

| About Ricoh group|

Ricoh group is a global enterprise which provides document management systems, IT services, production print solutions, digital cameras, industrial products, services, etc. to about 200 countries and regions in the world. (Ricoh group's consolidated sales in the financial year ending March 2015 were 2,231,900 million yen). It has positively worked through the provision of high technical capabilities, conspicuous customer services and the realization of a sustainable society over the 80 years since foundation.

Concentration of imaginative power yields changes. The Ricoh group will keep providing new values to customers by "imagine! Change!"

For more detailed information, please visit <http://jp.ricoh.com/>

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