# We are promoting the renovation of the working style aiming to create an office environment with less environmental impact and higher operational efficiency.

## ■ Concept

Non-production sites of the Ricoh Group carry out energy-saving and discharged matter reduction activities using the PDCA cycle, adopting the same concept as production sites. They quantify the environmental impact of airconditioning facilities, lighting, disposal of waste, etc. to see which part of the offices causes a higher environmental impact. Based upon the quantified data, systematic efforts are made to carry out measures with greater effects. The Ricoh Group promotes measures for improvement incorporating even the revision of employees' working styles and workflows, including how to manage documents and use of telephones and computers, so that environmental impact can be reduced and operational efficiency improved to a greater degree. We will continue to engage ourselves in sustainable environmental management of offices through the renovation of working styles.

#### ■ Target for Fiscal 2010

○ Control CO₂ emissions in nonproduction activities so that they will not exceed the emissions in fiscal 2006 (Ricoh and nonmanufacturing subsidiaries in Japan).

#### ■ Review of Fiscal 2009

CO<sub>2</sub> emissions in offices were reduced by 9.5% from fiscal 2006, as a result of improvement activities incorporating the revision of working styles and workflows. Activities participated in by all employees were also continued, including a campaign to have all employees leave the office without working overtime on particular days. This all-hands activity was carried out more strictly and with increased campaign days, and has produced continuous and growing results. Activities to promote the use of energy-saving features in Ricoh products in our own offices-including reviewing the

settings for energy-saving modesare also being conducted, leading to reduced environmental impact. The information obtained is also being used as know-how that can be referred to when we recommend such features to customers.

#### **■** Future Activities

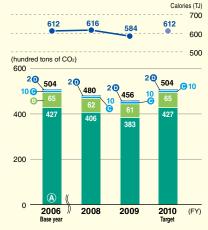
Particular efforts will be made for the reduction of CO<sub>2</sub> emissions, mainly through the improvement of operations. The know-how obtained will be shared within the Group, while being accumulated as know-how to be used in the office solution business as well as in recommendations to be provided for our customers.

# <Japan>

#### **Energy consumption** (CO<sub>2</sub> conversion and calories)

1 The Ricoh Group (Non-Production)

🛕 Sales subsidiaries 📵 Logistics (Ricoh Logistics System)



# Total amount of discharged matter generated

The Ricoh Group (Non-Production)

- Logistics (Ricoh Logistics System)Finance (Ricoh Leasing)
- General services (Ricoh San-ai Service)



<sup>\*</sup> Increases for Ricoh Logistics System (fiscal 2008) in the graphs above are due to the expansion of the area of data collection.

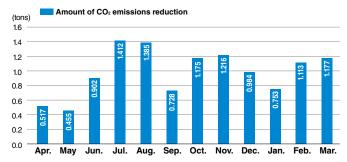
# CO<sub>2</sub> reduction effect of Super Fresh-up Day

#### <Ricoh (Japan)>

Ricoh designates two days per week as "Super Fresh-up Days," for the prevention of excessive overtime work by employees, the promotion of physical and mental refreshment, and the reduction of environmental impact at business sites. On a Super Fresh-up Day, employees are supposed to leave the office and put out lights by 18:30. Our calculation of the effects of this measure at the Head Office, where 1,736 employees work, showed that CO<sub>2</sub> emissions were reduced by about 0.15 tons on average on a Super Fresh-up Day, or a total of about 11.8 tons per year.

# CO<sub>2</sub> emissions reduction due to "Super Fresh-up Days"

Head Office: 1,736 employees, April 2009-March 2010



# Internal use of the energy-saving mode to promote the practice at customer sites

## <Ricoh Group (Global)>

The Ricoh Group is promoting the use of the energy-saving mode to help customers reduce their environmental impact. Before urging our customers with confidence to use the energy-saving mode, we needed to know the effects of the mode as well as the possible inconveniences or dissatisfactions from the customer's perspective. Between February 2009 and March 2010, we conducted a survey on a total of 1,500 copiers used at Ricoh offices and manufacturing subsidiaries worldwide to verify the benefits and to identify possible issues with the energy-saving mode.

As a result, we discovered that unless there is a special work-related reason for not using energy-saving mode, we could use it without any problems. We were able to gather proposals and information from employees for improvements aimed at persuading customers to use the energy-saving mode. In addition, after this internal use of the energy-saving mode, we found that reduction in CO<sub>2</sub> emissions and energy consumption totaled roughly 17 tons and 45 MWh per month, respectively. The Ricoh Group plans to continue internal testing and looking for ways of reducing CO<sub>2</sub> emissions during product use, and we will incorporate the results of these activities into suggestions for customers on how to effectively use the energy-saving mode at their sites.

# Green Certification and Internal Energy Saving Program: leading by example in creating a low-carbon office <Ricoh Europe B.V., all Ricoh Group companies in Europe (Europe)>

Ricoh Europe B.V. (RE) and all Ricoh Group companies in Europe have been implementing two internal initiatives to support the Group's new "PPP (pay per page) Green Marketing strategy\*," a strategy to provide customers with a solution to reduce their costs and environmental impact.

Under these programs, employees will gain a better understanding of the environmental impact and cost reduction effects of Ricoh products by actually using the excellent energy-saving functions of our copiers, including the optimum equipment layout, energy-saving mode, and double-sided printing for reduced paper consumption.

The first initiative, the Green Certification Project, was launched in May 2009 at all Group companies in Europe. The participating companies evaluate their office equipment usage (covering all office equipment in use, whether Ricoh equipment or not), and determine the total cost of ownership (TCO), including the environmental impact and operating costs. Then a detailed analysis of usage history and TCO is conducted with the use of a consultation tool. Based on the analysis results, participants will find an optimal solution to reduce the number of equipment units in use and minimize their environmental impact, while improving their productivity and usability. The solution developed will be applied in the office to reduce CO2 emissions and operational costs. A Green Certificate will be issued for the reduction achieved, bearing the signature of the top management of RE. In March 2010, the first Green Office Certificate was awarded to Ricoh France S.A.S. (RFR). This was followed by the certification of Ricoh Europe (Netherlands) B.V., RE headquarters in Amstelveen, in April. Similar efforts are underway in all Ricoh Group companies.

The second initiative is the Internal Energy Saving Program. An example of this initiative is the four-month project organized by RE headquarters in London, starting in September 2009. Under this project, a survey was conducted on the usage status of energy-saving features of Ricoh's products in use at the headquarters office, in order

to obtain ideas for effective use of these features as well as identify issues to be improved. The project was designed to use findings from survey results for enhancing marketing activities, in particular, emphasizing to customers the advantages of Ricoh's energy-saving features.

For the purpose of promoting energy-saving modes, the survey was carried out in two steps: (1) install an electric power meter on units to be surveyed to monitor changes according to operational mode and verify effects of energy-saving modes; (2) conduct employee interview surveys on the use of the energy-saving modes, with reference to the electricity consumption survey results, to seek optimal usage and implement improvements. The electricity consumption survey was conducted at two levels of the energy-saving mode, namely, the Ricoh standard mode (factory default) for the first two months and an increased energy-saving mode for the remaining two months. The results showed a further reduction of approximately 13% in the second half of the period compared to the first.

In order to promote paper usage reduction, another object of the internal project at the London headquarters, measures were taken to promote use of the double-sided printing feature. Specifically, these measures consisted of two elements: (1) take every opportunity to encourage employees to use the double-sided printing function and raise awareness of this issue among them; (2) hold interview sessions for employees who are less aware of the use of the double-sided printing function, in which details of their work methods are discussed so that the energy-saving potential of such functions can be shared.

Also as part of the project, the double-sided printing function was set by default in all units used in the London headquarter office, and use status on these units was monitored. The result showed no remarkable increase in use of the duplex feature, which proved to be credited to employees already possessing high awareness of this issue (average use rate had already reached approximately 70% prior to the survey).

RE will continue these internal improvement initiatives to make use of findings to develop better measures and to provide customers with more effective solutions to support their environmental impact reduction.

\* A marketing strategy for Europe based on the Ricoh Group's global strategy: Total Green Office Solution (TGOS).



The first Green Office Certificate, awarded to