Using the Comet Circle Concept to Help the Ricoh Group Build a Society that Recirculates Resources.

The sustainable society of the future needs to produce maximum output with minimum resources and energy. It needs to restrict the environmental impact of all economic and social activities so that the natural environment can recover on its own. The Comet Circle represents a resource-recirculating society and points out activities and partnerships that the Ricoh Group must deal with.

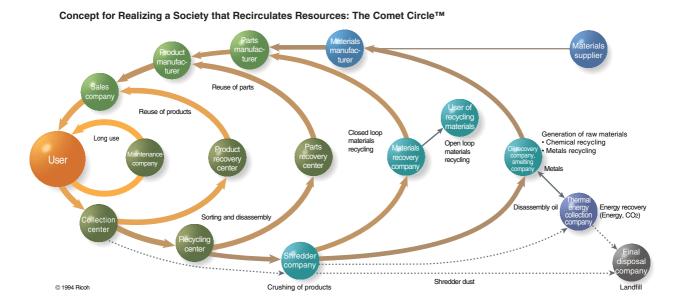
The Ricoh Group not only promotes its sustainable management, but also enthusiastically encourages suppliers, customers, and recycling companies to set up their own sustainable management. Moreover, the Group strives to make the resource recirculation of the Comet Circle smaller at all stages (entities represented by spheres) by improving economic efficiency and reducing environmental impact. This would reduce the total amount of environmental impact produced by economic and social activities.

The Comet Circle is a graphic representation of environmental conservation. In today's world, both the product and the manufacturing process of that product determine corporate value and what people purchase. Our philosophy goes beyond environmental conservation concepts and ensures the credibility of our products, none of which are produced under poor conditions or with child labor or by any other reprehensible means. Such profiteering is both unfair and incompatible with the philosophy of Ricoh Group.

There are Comet Circle members other than the Ricoh Group, suppliers, customers, and recycling companies. When individuals who direct their efforts toward building a society that recirculates resources more efficiently shop for things that have less environmental impact, separate their garbage for recycling, or take environment conservation and social responsibilities into consideration when making investments, they become a part of the Comet Circle, too. Everybody should be aware of the resources that went into the clothes that they buy and how those things were delivered. They should also think about how those clothes

will be recycled after they are collected as trash. We recommend applying any situation to the Comet Circle.

Our mother earth is the most important and irreplaceable component of the Comet Circle. We, within the Comet Circle, cannot prosper alone if we cause continuous damage to the earth.



(1) Determine and Reduce Environmental Impact at All Stages

A society that recirculates resources must minimize the total environmental impact it causes by reducing it at all stages, including the transportation stage (the entity represented by a sphere in the Comet Circle diagram). For this reason, the Ricoh Group, suppliers, customers, and recycling companies must first determine the degree of environmental impact at all stages, including the transportation stage, by using an environmental management information system¹ and then reducing it by using the latest environmental conservation technologies² and promoting recycling and collection systems all over the world³.

- 1. See page 23.
- 2. See page 31.
- 3. See page 50.

(2) Priority on Inner Loop Recycling

Resources have the highest economic value when they are manufactured into products and used by customers. The Ricoh Group puts priority on reducing, reusing, and recycling products on the inner loops of the Comet Circle, aiming at minimizing the resources, cost, and energy needed to return used products to their highest economic value.

(3) Promoting a Multitiered Recycling System

Repeated recycling to the furthest extent possible (i.e., multitiered recycling) reduces the consumption of new resources and the generation of waste. The Ricoh Group is developing activities to achieve this goal, such as recycling its products as well as waste from other companies or industries, e.g., making toner cartridges from used polyethylene terephthalate (PET) bottles.

(4) More Economically Rational Recycling

A society that recirculates resources must also establish a recycling system in which products and money flow in opposite directions in both post-product-use stages and original production and marketing stages. The Ricoh Group, making use of an upgraded design, is promoting a more economically rational recycling system in partnership with recycling companies. In Japan, the Green Procurement Law came into effect in April 2001, and Canada established an Environmental Choice Program (ECP) Mark system*. Therefore, it is important to establish a social system that helps people to be aware of environment-friendly business activities and buy products with less environmental impact.

(5) Partnerships at Every Stage

The Ricoh Group, as a manufacturer, is limited in what it can do to reduce the environmental impact caused at each stage of production. The Group can effectively reduce environmental impact and recycling cost only by decreasing its usage of chemical substances with the cooperation of materials and parts manufacturers, urging customers to use products that have less environmental impact or use products in ways that produce less environmental impact, and improving efficiency in the transportation of products to be marketed as well as used products. Thus, environmental impact can be reduced effectively in an economically rational way by forming a partnership at every stage.

The Ricoh Group helps reduce the environmental impact caused by society as a whole by sharing the information and know-how it obtains through its activities in the community. We consider that partnerships are to share the information and we regard any stakeholders, who receive the information as our partners.