



Sustainability by default

Sustainability initiatives have long been a checkbox on the corporate agenda. Business sites, supply chain and production are organised towards achieving resource efficiency and cost savings, but 'sustainability' remains either a convenient byproduct or the accompanying simple rationale required to bring change. Nowadays, doing the right thing by embracing sustainable practices from the inception is the only way for businesses to expand and achieve even greater loyalty among their customer base to build responsible, purpose-driven brands.

Companies that truly reap the benefits and receive perpetual returns are those that regard sustainability as a source of innovation, reinvent their business models to ingrain and extend these principles and redesign their products to bring factual change. Improving the organisation's bottom line while upholding best practices becomes part of the result. Global CEOs whose opinions resonate throughout the world are those that recognise the need to cement sustainability objectives and outcomes as something fundamental, strategic and as the catalyst for positive change.

In today's new world of work, Ricoh delivers solutions and services that help our customers rethink their print infrastructure, reinvent essential flows of information to achieve efficiency and high-performance, but more importantly, to consolidate a genuinely sustainable workplace environment. At Ricoh we have resources and expertise to help you integrate your sustainability initiatives into every aspect of your business.

Our portfolio of products, services and product features give our customers the choice to proactively embed sustainability and best practice in their everyday work. The programmes we've designed have been tried, tested and help customers discover, transform and manage their sustainability targets to deliver concrete results. Trust our teams with the right expertise and necessary tools to revolutionise your workplace and set your organisation up for sustainable business growth.

From its inception, Ricoh has always regarded environmental conservation as a way of doing business with sustainable development as an integral part of economic prosperity. Ricoh's roots stem from the philosophy where reducing our environmental impact is not enough, we aim to get our activities to a level where the Earth's self-recovery capabilities can manage. We have committed to conserving energy, preventing global warming and pollution, recycling resources and preserving our world's biodiversity. Find here our results:

Energy Conservation Resource TARGETS 8 and Prevention of conservation **Global Warming** Reduce total lifecycle Reduce the new CO, emissions input of resources By 2030 2050 2030 -30% Achievement by Fiscal year 2017 Achievement by Fiscal year 2017 **29.4%** 46.6% less input of new resources in less in total lifecycle CO₂ emissions product manufacturing

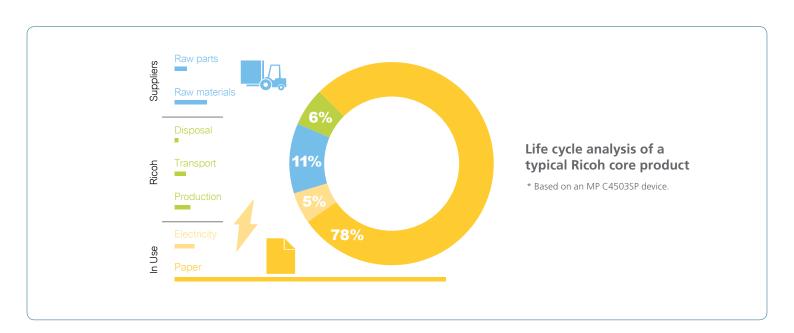


Transparency of the environmental impact

We've set our targets, but sustainability is truly all encompassing and unlike what is often perceived, negative environmental impact is not always something that largely occurs in the production phase.

A Life Cycle Analysis (LCA) shows us that the within the lifespan of a typical Ricoh product*, the largest impact – more than 60% - occurs in the In-Use phase with paper accounting for 78%. Traditionally, the In-Use phase is solely controlled by customers, however it's easy to literally leave anyone to their own devices.

This is why we take the responsibility and commitment to help our customers not only optimise and get the most out of their infrastructure and investment but also to operate a sustainable business model that is innovative, within a sustainable society.



Discovering Ricoh's portfolio of sustainability services, products and product features

Ricoh Sustainability Management Services has a focused portfolio of sustainability services, products and product features that will help you achieve **energy efficiency, resource conservation and enhanced human wellbeing** at your workspace, no matter the size of your document management fleet in your home office, corporation or a print shop. Our offerings range from optimising your current infrastructure for energy and resource efficiency, to fulfilling carbon-balanced print services, remote diagnostics & monitoring, waste minimisation and elimination, ensuring user safety and security, an end-of-life recycling programme – and much more.

How Ricoh can help customers

to become more energy efficient and achieve net-zero carbon footprint Ricoh's energy efficient products can help you reduce the energy consumption and running costs of your operations. Carbon Balance services will help you offset your remaining unavoidable carbon footprint leaving the smallest environmental footprint possible.

How Ricoh can help customers

to become more resource smart

Ricoh's "Reduce, Re-use, Recycle" offerings can help you contribute to efficient resource management in your workspace, by helping with your organizational resource conservation targets or practical waste minimization initiatives.

How Ricoh can help customers

to enhance well-being

Next to environmental credentials, we can also help you to better cater for the social needs within your organization, by having offerings addressing inclusivity, end-user well-being and workstyle transformation to enhance the new way of working.

Our rich sustainability heritage as well as offering the broadest sustainability portfolio creates new possibilities to address your most complex sustainability challenges at your workplace, in your workstyle. Find out about Ricoh's sustainability solutions further down in this brochure.

Products and services to optimise your energy use and achieve net-zero carbon emissions

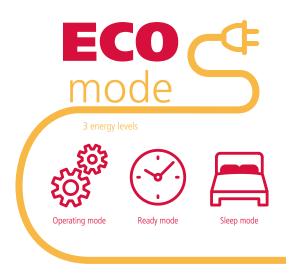
To optimise energy use, reduce carbon emissions and running costs, Ricoh offers a variety of energy saving products and services:

Products

Energy efficient products – Through innovations like Quick Start-Up technology, low energy sleep mode, a short recovery time from sleep to operating mode and a reduced toner fusion point, many of our products are top class in energy efficiency, both in terms of TEC¹ values as defined by ENERGY STAR programme and the actual power consumption values.

Energy management tools and software – The majority of our MFPs and printers are compatible with the remote diagnostics tool @Remote. Environmental Sustainability metrics in @Remote diagnostic give you an excellent overview of the sustainability performance of Ricoh fleet. Our consultants are at your disposal to share insights on the sustainability performance of each device, even compare the actual device performance per month against the set baseline targets. Based on this regular interventions can be made, such as correcting, replicating and re-calibrating the device, to ensure up-to-date performance.





Features

Many of our products come with built-in and add-on features designed to boost energy efficiency. The most energy efficient settings on your MFP or printer called **EcoMode** are activated by the very short Auto Off timer setting lowering your power consumption, running costs and carbon footprint while super-fast Recovery time makes sure there is no impact on your productivity. **Eco Night sensor** on certain low-end printer models shifts the device to the Sleep mode thanks to a sensor which detects darkness. The Weekly Timer on our multifunctional products switches off the device during the night and weekends. If required devices can be easily re-started to be ready for use within a few seconds. Some newer devices are also equipped with an innovative **motion sensor**, which senses an approaching user by detecting the differences in body temperature versus the surrounding environment. The system will awake from Sleep Mode and turn on the operation panel within a second so it is ready to begin job programming by the time the user arrives at the machine.

¹ TEC stands for the Typical Electricity Consumption reported by OEMers according to ENERGY STAR® programme. TEC test procedure resembles a typical working week and is not meant to precisely replicate real-life operating patterns which may vary per customer. TEC is generally used to compare the relative energy consumption of imaging products.

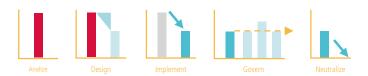


Services

Within our sustainability portfolio of products and services that address the challenge of energy efficiency, we offer the **Sustainability Optimisation Programme**. This programme is a service adopting a consultancy-based approach to help you achieve a measurable reduction in your CO₂ emissions by optimising your document production and reducing your Total Cost of Ownership (TCO) within the **In-Use** phase.

While demonstrating the environmental impact of the In-Use phase, the Sustainability Optimisation Programme offers transparency from the start. It gives insights into the carbon footprint of your Ricoh office equipment at the stages of raw materials extraction, manufacturing and assembly and distribution to the delivery destination, the so-called **Pre-Use**².

Sustainability Optimisationprogramme



Our approach consists of five steps that will help you to achieve an average reduction of 34% in carbon emissions and 29% in your TCO. To complete the path towards a **zero carbon footprint**, we analyse, design, implement, govern and neutralise. This programme is founded on a **vast pool of experience** in analysis and implementation, having completed more than 10,000 green audits since its launch covering both SMBs and

large corporations across Europe. Through these insights, we have continuously innovated and evolved to accommodate for the needs of our customers by improving our sustainable hardware product lines, tailoring software designed to optimise workflows, reduce waste and overflow and by bringing about change management by facilitating environmental awareness with the use of our solutions.





In addition, the Sustainability Optimisation programme has been **accredited** by SGS, complying with ISO standards and recognised as a factual way to calculate greenhouse gas emissions from document printing in a **transparent and reproducible** way.

Carbon Balanced Production Printing - A three-step consultancy approach that helps production print service providers whether a specialist reprographic company or a print room in a larger organisation to analyse, optimise and neutralise carbon emissions.

² The Pre-Use data is based on the EcoLeaf environmental label driven by the Japanese government that uses the LCA method to quantitatively show environmental information of products through life cycle stages from the extraction of resources to manufacturing/assembly, distribution, use and discarding/recycling, in accordance with the ISO 14040 / 14044 standards http://www.jemai.or.jp/

Products and services to help you get more Resource Smart

Ricoh's sustainability offerings include a rich portfolio of Reduce, Re-use, Recycle products and services to optimise your waste management and (re-)use of valuable resources, cut costs and environmental harm:

Products

Pre-owned devices, parts & supplies are designed for circularity, to keep the flow of materials and their value add as long as possible ideally achieving the residual waste close to zero. With GreenLine brand Ricoh goes further than just recycling - we totally "revitalise" multifunctional products. A range of thorough overhauling and testing procedures ensure that every Ricoh certified GreenLine device delivers the reliable, productive and efficient service that you'd expect from a brand-new Ricoh device. These products are highly economical and their resource recirculation process has reduced impact on the environment.







- Optimise paper usage
- Eliminate paper waste
- Save up to 75% on paper in one click

Print&Share Eco print driver - an outstanding innovation that sets a new benchmark for the responsible use of resources in parallel saving costs and time. It helps a customer reduce paper and avoid paper waste in just one click, by:

- Eliminates unwanted prints, such as pages with only a URL or blank pages
- Evaluates printing content and condenses it to fewer sheets.
- Reduces the use of paper by, for example, printing multiple pages on one sheet and merging white space, and many other functionalities.

It can be installed alongside any Ricoh printer driver on every Ricoh MFP and printer.

Software solutions to avoid paper waste and ensure confidentiality – Moving from paper to digital is a great way to optimise your paper output and reduce your environmental impact. Ricoh's comprehensive software portfolio can help you

get more Resource Smart without the hassle. To name a few:

- We can help you take your information from hardcopy or legacy digital files right to the Cloud.
 With Ricoh document conversion solutions utilising Optical Characters Recognition you can access your data faster with paperless processes reducing costs of consumables and energy wastage;
- eSignature technology helps you with smooth transition from paper-heavy documentation to environmentally friendly digital signature collection and verification.

Ricoh papers for office and production printing have some clear environmental benefits:

- Paper mills producing paper for Ricoh use resources from sustainable managed forests.
- Paper mills hold the ISO 14001 and EU Eco label.
- Ricoh paper has FSC and PEFC certifications.

Also Ricoh devices are designed to work optimally with recycled paper, which fulfils the criteria of the EN12281 standard.

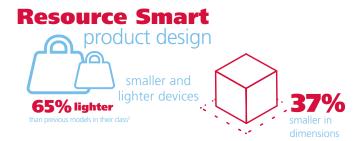


Features

Our latest devices are designed smaller and lighter. Latest MFPs designed **smaller and lighter**. Our full-colour RICOH MP C6004 is over 65% lighter and 37% smaller in the dimensions than previous models in their class³.

Use of **alternative materials** - Some newer multifunctional products are even more resource efficient in their design as increasing use is made of alternative raw materials as steel scrap for MFP's mainframes, post-consumer PET plastic recovered from household waste soft drinks bottles in Ricoh's toner bottles, or plant-based bioplastics used in some outer parts of our office and production printing devices.

Other resource efficient features include **standard high speed duplex, staple-less finisher** allowing to staple up to five pages without using a metal staple. Our latest devices are equipped with an **eco friendly widget** on the smart operation panel which sends users hints for conserving paper and indicates how much paper you are saving by printing "green".





Services

End of life management – our office and production printing customers get an access to an easy return of used consumables and parts that are recovered for post-consumer life at our remanufacturing centers.





Products and services for safe, productive and sustainable workplace

Ricoh's human well-being solutions include products and services addressing inclusivity, enduser well-being, comfort and security:

Products

Our portfolio of hardware to foster the workstyle innovation at your office improve efficiency, collaboration, work-life balance while decreasing travel costs and carbon footprint. Use Ricoh **Unified Communication Systems** to allow users to participate from afar via video conferencing driving your business goals forward with no harm to the environment. Ricoh **Interactive Whiteboards** help you modernize the way you conduct meetings, workshops, and lectures. Advanced tools – such as the ability to convert handwriting to text – give you an engaging presentation platform that's easy to edit and mark-up, without the resource abuse. Ricoh **Mobile Printing** solutions support user comfort as users can utilise the cloud to print from anywhere while using their own device (BYOD).

One-stop solution to enhance "New Workstyle"









Paperless

Reduced travel and costs

Virtual meeting rooms

Improved worklife balance

User/operator well-being – Users of Ricoh's office MFP's and printers as well as production printing devices can rest assured that no risks to their health can be expected as a result of toners and emissions if these products are used as intended and subjected to proper maintenance and cleaning. Ricoh printing products and toner formulations currently on the market are subjected to in-depth internal and external product and quality inspections and meet all required occupational health and safety legislation.

Among Ricoh supplies we also have the latex ink for large format series that are not only environment-friendly but also have the reduced operator's health impact due to no odour and a low level of emissions as volatile organic compounds.





Features

Inclusive design and accessibility solutions to meet the requirements of any end-user - Ricoh MFP's are equipped with various accessibility to ensure an inclusive workplace. These features are tiltable operation panel, normal & reverse grip on easy sliding trays, accessibility handle and many more. New MFP's can be also enhanced with the **Accessibility app** helping people with visual impairment operate Ricoh's MFP's through specifically designed screens and talk-back technology.

Services

Through a combination of Ricoh secure hardware, software and technical expertise, we help our customers improve **print security and confidentiality**. Ricoh's print security assessments create an optimal state of security around a hardcopy device by understanding threats and vulnerabilities to customers' information assets. This standardised approach encompasses the analysis, optimisation and governance of the state of print security for customers' most valuable information assets. And as the last step we offer the Full Data Cleansing service at end of contract to ensure all customer data is erased beyond recovery on every memory module of a device.

Ricoh Print Security Optimisation Service





Sustainability at Ricoh

Ricoh has been always on the upfront of the sustainable product design announcing its material- recirculating Comet Circle philosophy back in 1994. The **Comet Circle** prescribes how Ricoh products are designed, manufactured, used, and recovered as we move towards the **circular economy** business model. With increased functionality and performance, your Ricoh products do more, require less energy and resources to manufacture and use, and are easily reused and recycled.

All Ricoh products are compliant to local, national and international Health & Safety legislation. We provide **Safety Data Sheets** and **Product Environmental info** for products we put on the market. Next to low Typical Electricity Consumption (TEC) rates with ENERGY STAR® programme, Ricoh devices enjoy the highest number of EPEAT® Gold rankings. It is Ricoh intention to keep on meeting the European standards for energy and resource efficiency as the **Blue Angel Mark**.

Ricoh has been consequently recognised by **CDP** high climate disclosure and performance scores. Ricoh's practical approach to sustainability in their supply chain has been rated highly by **EcoVadis** sustainability survey.

With Ricoh's sustainability technology you can enable **workstyle innovation** while demonstrating responsible environmental stewardship in so many way. Take advantage of our unique sustainability offerings to uncover savings and distinguish your business as a leader in a sustainable way.



Vodafone's Mobile green IT printing initiative.

The Challenge

To reduce the environmental impact of its office print environment, Vodafone launched a Green IT 'Less Paper Office' initiative which aimed to achieve:

- Smaller carbon footprint.
- Lower Total Cost of Ownership.
- Improved service delivery.
- Increased security.
- Managed global print service.

The Ricoh Solution

Ricoh has developed an eco-efficient print infrastructure for the group supporting Vodafone's flexible work and mobility strategy including developing:

- Green office environmental survey.
- Global/local project management.
- Standardised best-fit technology.
- Dedicated on-site service support.
- Detailed global/local reporting.

The Results

Global rationalisation and standardisation has increased the employee to device ratio by 300% (from an average 20:1 to 60:1), has reduced paper consumption by up to 75% in some regions and has led to an average 50% reduction of annual office print cost per user. Additionally, it has helped the company achieve significant and sustainable reductions in its carbon footprint by almost 3 million kilograms per annum.

