

# Carbon Balanced Printing

Quick Reference Guide



## Introduction

Energy and paper consumed by printing processes generate CO<sub>2</sub> emissions. CO<sub>2</sub> emissions are a cause of climate change, the consequences of which are irreversible.



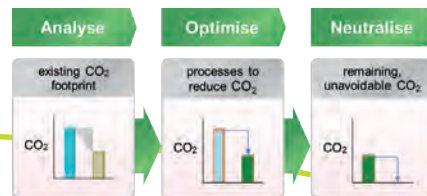
Ricoh helps organisations to neutralise the impact of their print processes by reducing energy and paper consumption and offsetting the remaining, unavoidable CO<sub>2</sub> emissions with carbon credits.

*Lifecycle analysis (LCA) shows that around 80% of a printer's environmental impact occurs during the in-use phase. This is the phase in which we focus our analysis.*

## Three steps to carbon balanced printing

1. Our consultants **ANALYSE** CO<sub>2</sub> emissions generated by existing Ricoh cut-sheet production printers. We consider all contributing factors, even making allowance for the provision of consumables and printer maintenance.
2. Having identified ways to reduce print related CO<sub>2</sub> emissions, we help customers to **OPTIMISE** their print environment, making it more sustainable.
3. The final step is to **NEUTRALISE** residual CO<sub>2</sub> emissions through the acquisition of 'carbon credits' generated from Ricoh's own investment in renewable energy projects.

*Ricoh's Carbon Balanced Printing programme is only available to customers of Ricoh cut-sheet production printers.*



## Carbon Credits

Carbon credits or **Carbon Emission Reductions (CERs)** are tradable credits generated by emission reduction projects used to compensate for unavoidable CO<sub>2</sub> emissions.

One carbon credit will offset 1 tonne of CO<sub>2</sub>



*Carbon credits issued by Ricoh are generated by our own investment in a wind energy project in India. The project is certified by the United Nations Framework Convention on Climate Change (UNFCCC project number 0570).*

## The cost of carbon balanced printing

Customers joining Ricoh's Carbon Balanced Printing programme pay for two things:

- The Ricoh consultant's time to perform the **ANALYSIS** and **OPTIMISATION** consultation (normally charged at half a day professional services time)
- The cost of the carbon credits required to offset the CO<sub>2</sub> and **NEUTRALISE** their annual print volume

Carbon credits are surprisingly affordable. At the end of 2012, the cost of offsetting an annual print volume of 1 million sheets produced on a Ricoh Pro 901 was less than €50.

*Ricoh does not make money from carbon credits - they are retired to meet the customer's offset requirement and are re-charged at their current market value.*

## Print Job Carbon Calculator

When a customer joins the Carbon Balanced Printing programme, they are given access to an online carbon calculator on Ricoh's Business Driver portal.



They can use the calculator to:

- Determine the impact of individual print jobs or cumulative print output over a period of time
- Identify ways to optimise print jobs by modifying the format or paper properties and recalculating the CO<sub>2</sub> emissions
- Produce a "carbon balanced certificate" to present to clients to confirm that their print is carbon neutral

*The Carbon Balanced Printing programme's processes and methodology are accredited by BSI.*

## Becoming a certified Carbon Balanced Printer

- A Ricoh consultant will perform the **ANALYSIS** and agree an **OPTIMISATION** plan with the customer and their production staff
- Having optimised production processes, the final CO<sub>2</sub> emissions are recalculated and the required number of carbon credits are retired for the customer



- The customer is issued with an annual **CBP Membership Certificate** and given access to Ricoh's online **Carbon Calculator** and **Certified Members Marketing Toolkit**

## More Ricoh 'green' initiatives

Ricoh's Carbon Balanced Printing programme and other environmental initiatives are supported by a range of sustainable consultancy services offered by Ricoh through its **Business Driver Programme**.



And, because waste and recycling is of growing importance to us and our customers, we have provided the **Resource Smart Return Programme** which enables customers to return selected printer parts and consumables to Ricoh for recycling.

**RICOH**  
imagine. change.

[www.ricoh-europe.com/carbonbalanced](http://www.ricoh-europe.com/carbonbalanced)

Copyright © 2013 Ricoh Europe PLC