


### Company environmental profile - THE ECO DECLARATION

Brand	RICOH	
Company name *	RICOH Company Ltd.	
Contact information	Ricoh Europe Plc 66 Chiltern Street, London W1U 4AG, United Kingdom emo@ricoh-europe.com	
Internet site *	www.ricoh.com	
Issue date *	1 November 2010	
Intended market *	<input type="checkbox"/> Global <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Asia, Pacific & Japan <input type="checkbox"/> Americas <input type="checkbox"/> Other	
Additional information		

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version. The declaration may be published only when all rows and/or fields marked with an \* are filled-in (n.a. for not applicable). Additional information regarding each item may be found under C6 & P14.

Quality control		Requirement met	
Item		Yes	No
QC1 *	The company enforces an internal quality control system to ensure the correctness of this eco declaration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality control.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Company environmental profile - Legal requirements		Requirement met		
Item		Yes	No	n.a.
<b>C1</b>	<b>Product recycling</b>			
C1.1 *	The company participates in a system or has its own system for collection and recycling of end of life products in countries where the company puts them on the market and where required (2002/96/EC WEEE directive).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>C2</b>	<b>Battery recycling</b>			
C2.1 *	The company participates in a system or has its own system for collection and recycling of batteries in countries where the company puts products on the market (2006/66/EC Battery and accumulators Directive) or pays eco tax / fee where required.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>C3</b>	<b>Packaging recycling</b>			
C3.1 *	The company participates in a system or has its own system for collection and recycling of packaging material in countries where the company puts products on the market and where required (2004/12/EC Directive on packaging and packaging waste)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Company environmental profile - Market requirements		Requirement met		
Item		Yes	No	n.a.
<b>C4</b>	<b>Environmental policy and environmental management</b>			
C4.1 *	The company has a documented environmental policy approved by the management.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C4.2 *	The company has an environmental management system covering: Product development Manufacturing If so certified according to: <input checked="" type="checkbox"/> ISO 14001 <input type="checkbox"/> Other as specified in C6	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
C4.3	The company regularly publishes an environmental report. If so, it meets the recommendations of <input checked="" type="checkbox"/> The Global Reporting Initiative <input type="checkbox"/> Other as specified in C6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C5</b>	<b>Recycling</b>			
C5.1 *	Information about the product, battery & packaging take back system (C1, C2, C3) is available in printed or electronic format.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>C6</b>	<b>Additional information</b>			

### Product environmental attributes – THE ECO DECLARATION

The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.	
Type of product *	Multifunction product
Commercial name *	MP C4501
Model number *	Aficio MP C4501
Issue date *	1 November 2010

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

<b>Model number *</b>	<b>Aficio MP C4501</b>	<b>Logo</b>	<b>nashuatec</b>
<b>Issue date *</b>	<b>1 November 2010</b>		

<b>Product environmental attributes - Legal requirements</b>		<b>Requirement met</b>		
Item		Yes	No	n.a.
<b>P1</b>	<b>Hazardous substances and preparations</b>			
P1.1*	Products do not contain lead max 0.1%, cadmium max 0.01%, mercury max 0.1%, hexavalent chromium max 0.1%, polybrominated biphenyls (PBB) max 0.1% and polybrominated diphenyl ethers (PBDE) max 0.1% (2002/95/EC ROHS Directive) see note B1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.2*	Products do not contain Asbestos (REACH, Annex XVII). Comment: Legal reference has no maximum concentration value.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorocarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000). Comment: Legal reference has no maximum concentration values.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.4*	Products do not contain polychlorinated biphenyl (PCB) max 0.005% by weight, polychlorinated terphenyl (PCT) max 0.005% by weight (REACH, Annex XVII).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.5*	Products do not contain short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP max 0.1% (Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2, 3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridiny)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (REACH, Annex XVII). Comment: Legal reference has no maximum concentration values.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.7*	Textile and leather parts with direct skin contact do not contain Azo colorants that split aromatic amines max 0.003% by weight (REACH, Annex XVII and Note B1).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (REACH, Annex XVII). Comment: Legal reference has no maximum concentration values.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm2/week (REACH, Annex XVII). Comment: Max limit in legal reference when tested according to EN1811:1998.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact) (REACH Regulation 1907/2006, Annex VII)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P2</b>	<b>Batteries</b>			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual (2006/66/EC Battery and accumulators Directive).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium (2006/66/EC Battery and accumulators Directive).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be "easily removable" (2006/66/EC Battery and accumulators Directive).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>P3</b>	<b>Safety, EMC connection to the telephone network and labeling</b>			
P3.1*	The product complies with legally required safety standards as specified (2006/95/EC Low Voltage Directive).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.2*	The product complies with legally required standards for electromagnetic compatibility (2004/108/EEC New EMC Directive).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (1999/5/EC (R&TTE Directive).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.4*	The product is labeled to show conformance with applicable legal requirements (2006/66/EC Battery and accumulators Directive, 2006/95/EC Low Voltage Directive, 2004/108/EEC New EMC Directive, 1999/5/EC R&TTE Directive, 2002/96/EC WEEE directive)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P4</b>	<b>Consumable materials</b>			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (2002/95/EC ROHS Directive).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (REACH, Annex XVII).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS/MSDS) in accordance with these requirements (EC No. 1272/2008 regulation on classification, labeling and packaging CLP, REACH article 31, annex II).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P5</b>	<b>Product packaging</b>			
P5.1*	Packaging and packaging components do not contain lead, mercury, cadmium and hexavalent chromium max 0.01% by weight of this together (2004/12/EC Directive on packaging and packaging waste).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (97/129/EC Commission Decision on Identification System for Packaging Materials).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (2037/2000/EC Regulation on Substances that Deplete the Ozone Layer). Comment: Legal reference has no maximum concentration values.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %

Model number *	Aficio MP C4501	Logo	nashuatec
Issue date *	1 November 2010		

Product environmental attributes - Market requirements - Environmental conscious design		Requirement met		
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
<b>P6</b>	<b>Treatment information</b>			
P6.1*	Information for recyclers/treatment facilities is available (2002/96/EC WEEE directive).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P7</b>	<b>Design</b>			
	<b>Disassembly, recycling</b>			
P7.1*	Parts that have to be treated separately are easily separable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.2*	Plastic materials in covers/housing have no surface coating.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Product lifetime</b>			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.8*	Upgrading can be done using commonly available tools	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.9.	Spare parts are available after end of production for: 7 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.10	Service is available after end of production for: 7 years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Material and substance requirements</b>			
P7.11*	Product cover/housing material type: Material type: <b>PC + ABS</b> Material type: <b>PC + PS</b> Material type:			
P7.12	Electrical cable insulation material of power cables are PVC free.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.13	Electrical cable insulation materials of signal cables are PVC free.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.14	All cover/housing plastic parts >25g are free from chlorine and bromine.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.15	All printed circuit boards (without components) >25g are halogen free, as defined in IEC61249-2-21 (see note B2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4: Marking: <b>FR (40)</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.17	Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components): TBBPA (additive) <input type="checkbox"/> , TBBPA (reactive) <input type="checkbox"/> , Other; chemical name: , CAS #:  Alt. 2 Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: <b>FR (17)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.18	Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%: Comment: No legal limits exist, this is a market requirement.  1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #:  Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: <b>FR (40)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.19	Plastic parts >25g are free from flame retardant substances/preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (see note B3)(EC No. 1272/2008 regulation on classification, labeling and packaging CLP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.20	Of total plastic parts' weight >25g, recycled material content is <b>0%</b> [pls see P14 for additional information]			
P7.21	Of total plastic parts' weight >25g, biobased material content is <b>0%</b> .			
P7.22	Light sources are free from mercury If mercury is used specify: Number of lamps:                      and max. mercury content per lamp:                      mg	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P8</b>	<b>Batteries</b>			
P8.1*	Battery chemical composition (2006/66/EC Battery and accumulators Directive): <b>Lithium-ion</b>			<input type="checkbox"/>
P8.2	Batteries meet the requirements of the following voluntary program/s: <b>European eco-label (EU Flower) criteria (2001/687/EC &amp; 2001/686/EC)</b>			<input type="checkbox"/>

Note B2: IEC61249-2-21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

Model number *	<b>Aficio MP C4501</b>	Logo	
Issue date *	<b>1 November 2010</b>		

Product environmental attributes - Market requirements (continued)					Requirement met			
Item					Yes	No	n.a.	
<b>P9 Energy consumption</b>								
9.1 <a href="#">For the product the following power levels or energy consumptions have been measured:</a>								
Energy mode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Standard for energy modes and test method *	<input type="checkbox"/>			
<b>Maximum Energy Consumption</b>	W	W	<b>1700</b> W		<input type="checkbox"/>			
<b>Operating Mode</b>	W	W	<b>796.9</b> W		<input type="checkbox"/>			
<b>Ready Mode</b>	W	W	<b>181</b> W		<input type="checkbox"/>			
<b>Low Power Mode</b>	W	W	<b>102</b> W		<input type="checkbox"/>			
<b>Off/Sleep Mode</b>	W	W	<b>1.5</b> W		<input type="checkbox"/>			
	W	W	W		<input type="checkbox"/>			
EPS No-load (External power supply / charger plugged in the wall outlet but disconnected from the product.)	W	W	W		<input checked="" type="checkbox"/>			
PTEC * Typical Energy Consumption	W	W	W		<input checked="" type="checkbox"/>			
TEC * Typical Energy Consumption	kWh/week	kWh/week	<b>2.647</b> kWh/week		<input type="checkbox"/>			
ETEC * Annual Energy Consumption	kWh/year	kWh/year	<b>127.056</b> kWh/year		<input type="checkbox"/>			
Display resolution *: dpi							<input checked="" type="checkbox"/>	
Print Speed *: <b>45</b> pages per minute							<input type="checkbox"/>	
Default time to enter energy save mode: <b>16</b> minutes							<input type="checkbox"/>	
P9.2*	Information about the energy save function is provided with the product.				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
P9.3*	The product meets the energy requirements of the following voluntary program/s: ENERGY STAR® version <b>1.1</b> Tier: <b>2</b> Product category: <b>Multifunction</b> Others specify:				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>P10 Emissions</b>								
<b>Noise emission – Declared according to ISO 9296</b>								
P10.1	Mode	Mode description	Declared A-weighted sound power level $L_{WA,d}$ (B)	Declared A-weighted sound pressure level $L_{pAm}$ (dB)				
				Operator position <input checked="" type="checkbox"/>	Bystander positions <input type="checkbox"/>			
				Desktop <input type="checkbox"/>	(only if product is not operator attended)			
				or Desk side <input type="checkbox"/>				
	Idle	* <b>Stand-by</b>	* <b>4.2</b>	<b>26.5</b>			<input type="checkbox"/>	
	Operation	* <b>Operating Mode</b>	* <b>6.8</b>	<b>50.9</b>			<input type="checkbox"/>	
	Other mode							
Measured according to: <input checked="" type="checkbox"/> ISO7779 <input type="checkbox"/> ECMA-74 <input type="checkbox"/> Other (only if not covered by ECMA-74 with $L_{pAm}$ measurement distance m)								
P10.2	The product meets the acoustic noise requirements of the following voluntary program/s:				Blue Angel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					Nordic Swan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Chemical emissions from printing products</b>								
P10.3*	Test performed according to ECMA-328 (ISO/IEC 28360) standard <input type="checkbox"/> , other specify: <b>RAL-UZ</b>				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
P10.4	Typical emission rate (print phase) is (mg/h): Dust (monochrome <b>0.44</b> colour <b>2.41</b> ) Ozone (monochrome <b>&lt;limit of detection</b> colour <b>2.75</b> ) Styrene (monochrome <b>0.06</b> colour <b>0.11</b> ) Benzene (monochrome <b>&lt;limit of detection</b> colour <b>0.01</b> ) TVOC(monochrome <b>6.03</b> colour <b>9.68</b> )				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
P10.5	Chemical emission requirements of the following voluntary program/s are met for : Dust <input checked="" type="checkbox"/> Ozone <input checked="" type="checkbox"/> Styrene <input checked="" type="checkbox"/> Benzene <input checked="" type="checkbox"/> TVOC <input checked="" type="checkbox"/>				Blue Angel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					Nordic Swan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Electromagnetic emissions</b>								
P10.6	Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program/s:				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Model number *	<i>Aficio MP C4501</i>	Logo	<b>nashua</b> tec
Issue date *	<i>1 November 2010</i>		

Product environmental attributes - Market requirements (continued)		Requirement met		
Item		Yes	No	n.a.
<b>P11 Consumable materials for printing products</b>				
P11.1*	A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P11.2*	Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P11.3*	2-sided (duplex) printing/copying is an integrated product function.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P12 Ergonomics for computing products</b>				
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>P13 Packaging and documentation</b>				
P13.1*	Product packaging material type(s): <i>Corrugated Paper</i> weight (kg): <i>10.52</i> Product packaging material type(s): <i>Plastic</i> weight (kg): <i>0.875</i> Product packaging material type(s): weight (kg):			
P13.2*	Product plastic packaging is free from PVC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P13.3*	Specify media for user and product documentation (tick box): Electronic <input checked="" type="checkbox"/> Paper <input checked="" type="checkbox"/> Other <input type="checkbox"/>			<input type="checkbox"/>
P13.4*	For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber. %			<input checked="" type="checkbox"/>
<b>P14 Additional information</b>				
<i>This product is designed to utilise recycled plastic materials wherever available</i>				