

**Product: Printer Toner / Ink Cartridges**



**Overview:** There are no universally adopted standards; the degree of quality may be judged by the manufacturers warranty. Such a warranty should cover the cartridge against fault or loss of quality to the same degree as an original equipment manufacturer (OEM) cartridge. Some remanufacturers offer free emergency call out for printers using their cartridges.

For high quality EXTERNAL documents an OEM cartridge should be used, where as internal documents should be printed using remanufactured cartridges.<sup>1</sup> Any supplier should offer a free take back scheme for used cartridges and ensure that all returns are either remanufactured or recycled responsibly.

Environmental Impact	Cost Effectiveness	Market Availability	Competitive Market	Resource Savings	Potential for Increased Procurement to Affect the Market
1) Energy and resource usage during production. 2) Energy usage during printing (major). 2a) Energy used printing sheets with errors - wasted energy. 3) End of life disposal.	Remanufactured cartridges are priced extremely competitively, in general around 50-75% of new OEM cost. Wandsworth Borough Council estimated that they could save £40,000 a year by switching to remanufactured toner cartridges for internal printing. <sup>2</sup>	There are well established routes to market and supplies of core in this rapidly growing market, and extra capacity is emerging as remanufactured cartridges gain popularity.	The popularity of remanufactured toner and inkjet cartridges has meant that a thriving market of third party and OEM operations has emerged.	The embodied energy of the cartridge husk is preserved rather than being lost to recycling or landfill. The only available LCA (life cycle analysis) is inconclusive, but it does indicate that there are possible energy benefits from cartridge remanufacture. It also highlights the importance of the usage phase, where pages wasted due to poor quality cartridges can significantly affect the environmental impact of printing. <sup>3</sup>	By showing confidence in remanufactured cartridges, public procurement could dispel corporate customers' fears regarding printer reliability and print quality.

<sup>1</sup> Study carried out by Bureau Veritas (2004): most remanufactured cartridges were as good, if not better, than the OEM equivalent. But a select few showed a very slight deviation from the expected characteristics.

<sup>2</sup> London ReMaDe, Dec 2006

<sup>3</sup> First Environment, funded by Hewlett-Packard, 2004