

Summary of Environmental Initiatives

ecoDesign ecoPrint is a supplier of graphic design and offset lithographic printing in Sydney Australia. We have an environmental management system certified to ISO14001 standards and Chain of Custody certification for Forest Stewardship Council® paper stock. The company was established in 1992 to offer customers an alternative solution to their print requirements with the aim of minimising the impact on our environment.

As our name suggests, we emphasis solutions that take into account the customer's environmental objectives as well as their marketing and budget objectives. We service the government, corporate and private sectors and are finding more and more organisations are recognising the importance of a triple bottom line approach to doing business but are often unsure how to go about it.

Most people think only of recycled paper as a way they can do their bit for the environment. However, as detailed below, there are many other environmental issues we consider when providing our customers with environmentally sound print solutions.

Paper

Using recycled papers high in post consumer waste content is the most obvious solution to minimising the environmental impact. However, perhaps even more importantly, is the use of paper that is either totally chlorine free (TCF) or elemental chlorine free (ECF). Chlorine gas is the traditional ingredient used in bleaching paper. It is extremely harmful to the environment and results in an unwanted by-product known as dioxins. Approximately 3.5kg of dioxins is released per ton of paper pulp produced. Many regulators consider a level of between 1.5 and 1.0kg per ton of pulp produced to be relatively safe for the environment. ECF bleached paper substitutes chlorine gas with other chlorine compounds which yields 0.3kg to 0.5kg per ton of pulp produced. TCF paper substitutes all chlorine compounds with alternative compounds, for example oxygen, and yields 0.1kg which is virtually undetectable.

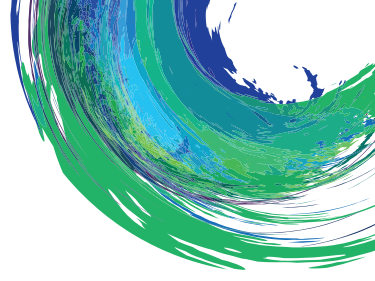
Papers which utilise virgin fibre should be selected from sources that have Forest Stewardship Council® (FSC®) seal of approval. ecoDesign ecoPrint have Chain of Custody Certification which assures our clients the paper their job is printed on has been

tracked at every stage of its journey right back to the planting of the trees in the forest and that these forests meet environmental and social standards required by the FSC®. For further information on FSC® see the environmental section of our website.

Overall reduction of paper stock can be achieved at the design stage by carefully planning jobs to fit efficiently (and economically) out of the print sheets. Ganging jobs together is an example of this process.

Inks

Traditionally printing inks have been made with petroleum oil. These inks have a tendency to decompose in light to form highly reactive compounds capable of destroying the ozone layer. These compounds, known as Volatile Organic Compounds (VOC's) are virtually non existent in vegetable oil based inks. We use vegetable oil based inks made from soya beans. A further benefit of using these type of inks is the fact that vegetable oil is a renewable resource as opposed to petroleum oil.



Solvents

Solvents are a major source of air emissions from printing operations due to their volatile nature. Strategies for the management of solvents have been adopted to reduce the overall emission of VOC's into the atmosphere. These include the substitution of solvent with other products wherever possible, minimisation of the use of solvents and the control of volatilisation through effective containerisation.

Cleaning solutions have been researched and only the most environmentally safe products are used. These include:

Envirosolve Roller and Blanket Wash — contains only non photo chemically reactive solvent (i.e. non chemical smog forming). Does not contain aromatics, glycol ethers, alcohol, ketones or chlorinated solvents.

BIO Plate Cleaner — contains citrus and non-photo chemically reactive petroleum spirit. Does not contain any harsh solvents or abrasives.

Bio Rubber Roller Rejuvenator — is free of petroleum hydrocarbon solvents. Citrus based and low odour.

Bio Deglaze Liquid Roller & Blanket Deglazer — free of petroleum hydrocarbons and phosphate.

Citrapro Hand cleaner — Citrus based low odour. Adhesives To effectively manage these emissions a solventless water soluble non-hazardous adhesive has been adopted.

Fountain Solutions/Alcohol ecoDesign ecoPrint was one of the first print companies to trial and then fully adopt the Press Control Fountain Solution. This fountain solution allows us to run our printing presses completely alcohol free. The average for most printers is 8-12%. Operational adjustments are required to effectively utilise the alternative product, however, any additional costs associated with the substitution are offset by the positive safety outcomes for staff and environment and removal of the need for pollution control equipment

Thank you for the opportunity to present our company to you. Should you wish to receive any further information please don't hesitate to contact us.

Rags. In the printing process, rags or disposable wipes are often used for cleaning purposes. Currently our rags are being collected by a licensed contractor and are kept in closed containers while waiting disposal.

Ozone Depleting Substances

Halogens and chlorofluorocarbons have the potential to detrimentally effect the ozone layer. All fire extinguishers used at the company are free of halogens, aerosols are free of CVC's and chlorinated solvents and air-conditioning is limited to the office and plate room and are CFC free.

Photographics Chemicals Management

The spent developer from the plate making process is store in the same containers it was delivered in. A licensed contractor is paid to dispose of it once the volume is sufficient.

Fuel, Oil & Grease Management

Waste oil can not be disposed into storm water or sewer. All printing presses are positioned on drip trays and rags used to clean up any excessive lubricating oil or grease are disposed of as hazardous waste by a licensed collector. No fuel is stored on site.

Other Liquid Waste Management

Only liquid waste allowable under the Commercial Trade Waste-water Permit we have been issued with, is to be disposed of in the sewerage system. Furthermore a dilution tank has been added to the outflow to ensure no impurities are entering the system.

Units 1 & 2, 56 Barry Ave, Mortdale NSW 2223

T 02 9597 7733 **F** 02 9597 7477

E admin@ecodesign-ecoprint.com

W www.ecodesign-ecoprint.com

ecoDesign ecoPrint is the business name of

Universal Graphics & Printing Aust. Pty Ltd

ABN 25 068 452 184