



# Making High Volume Printing Sustainable

Enabling relevant, responsible and effective communications



# Sustainability trends affecting the print industry



Over two thirds of respondents to a recent survey of 1,900 publishers, creative professionals and graphic arts professionals in North America said they expect the importance of corporate social responsibility and environmental factors in the print-related purchasing decisions of their organisations to increase over the next five years.



In recent years the print industry, and the needs of those who require and consume print, have changed due to a number of economic, technological, environmental and social factors.

- While it is acknowledged that paper production has some significant environmental impacts, definitive answers concerning the comparative environmental benefits of different print technologies versus electronic communication are not conclusive, as no two communication jobs are exactly the same and depend on the receiver.
- Governments and corporations have moved to digital communications, citing the environmental performance of print on paper and cost reduction as the major drivers. However the digital footprint of online communications has largely been ignored and there is a growing concern with the exponential growth of information that requires hosting through energy intensive data centres.
- Australian and state government regulation is also creating drivers to address the sustainability of print. Paper was identified as a waste of concern in New South Wales government policy. In addition the global drive to decarbonise business and industry growth will reward the least carbon intensive communication providers – exactly how that will impact the print industry remains to be seen.
- In tandem with regulatory developments, pressure is being applied from a range of stakeholder groups (customers, consumers etc) to reduce emissions and waste and increase sustainable practices across a range of industries. Responding to community environmental concerns is fundamental for print to maintain its social licence to operate.

Current debate focuses on whether the print or online medium is more environmentally sustainable than the other. However, eco-efficiency is meaningless without eco-effectiveness. Therefore, the discussion printers should be having with their clients is how to use electronic or print communication (or a combination of the two) to develop communication that is not only environmentally responsible but also applicable to customer needs by delivering an impression or response.

To fully develop communications effectiveness, the relative strengths and weaknesses of each medium must be understood, along with the strengths of combined media approaches. None of catalogue, direct mail, television, radio, e-mail, mobile, or billboard delivery provides a one-size fits all medium, and often deliver the most effective outcomes when used together.

Market opportunities exist for printers willing to embrace the new business of printing – one that is relevant, responsible and effective.

# Environmental impacts of paper production, print and online communication

The environmental credentials of paper are closely linked to the perceived sustainability of print as a communication medium. Paper production has a range of environmental impacts that are not well understood by those outside the industry.

Key environmental issues of concern are fibre sourcing and certification, forestry and carbon accounting, water and energy use, and emissions to water, land, and air, as well as waste and the use of recycled content. Conflicting messages from the various activist and apologist voices surrounding paper and the environment have created confusion across consumers of print media – therefore those who are able to answer these questions objectively will offer increased value to those consumers.

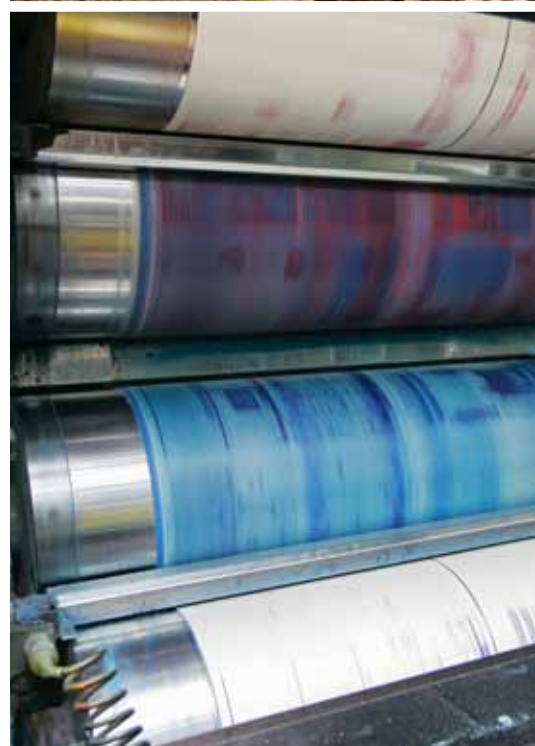
These issues have been dealt with in more detail in other Fuji Xerox publications, including The Paper Facts and can be further explored through those resources. Please visit [www.thepaperfacts.com.au](http://www.thepaperfacts.com.au)

## Relevant, responsible and effective

**Relevant** communications are directed and pertinent; applicable to customers' needs and wants at a time and place that the customer demands.

**Responsible** communications monitor and ensure adherence to law, ethical standards and customer expectations. Companies act responsibly with their communications by reducing the impact of their activities on customers, employees, other stakeholders, communities and the environment.

**Effective** communications provide competitiveness in the marketplace. They are communications that have a deep and vivid impression and create a strong response to accomplish a desired outcome.



# 12 Tips Towards A Sustainable Print Operation

# 1

**Understand your environmental impacts and set goals to reduce them by implementing an Environmental Management System (EMS) in your operations in line with ISO 14001 standards. Print industry associations have developed a step-wise approach towards ISO 14001 that is designed around your operations' typical impacts. Common considerations include:**

- Establishing an environmental policy.
- Engaging employees in all aspects of your EMS.
- Establishing programs for improvement based on environmental goals and measuring performance regularly.

# 4

**Adopt the latest workflow technologies and automate manual processes:**

- Reduce labour costs and free up capacity to do other work.
- Enable load balancing across devices.
- Receive jobs and print orders over the web, automatically enabling more timely responses and a more complete job brief upfront. This can provide more accurate cost estimates and smoother job delivery.

# 2

**Minimise the impact of traditional offset printing:**

- **Improve indoor air quality by utilising products with lower emissions and technologies that use fewer chemicals such as non-toxic toners and vegetable-based inks.**

# 5

**Use paper efficiently; whether for internal office use or on your print floor:**

- Print duplex (double-sided) for internal documents, to integrate this into your business process set as a default on your office devices and multi-up where appropriate (print multiple pages on a sheet).
- Install recycle bins in facilities to collect paper and unused prints for recycling.
- Use scan-to-email functionality, rather than faxing.
- For internal communications, to achieve a balance of effectiveness and cost, consider email communications rather than printed material.

# 3

**Waste costs money. Embrace print on demand:**

- For some eliminating the warehousing of pre-printed materials is an opportunity that can save both space and resources.
- Eliminate obsolescence of printed materials. Print smaller quantities, make revisions and print updated versions to reduce waste by as much as 30%.

# 6

**Utilise soft proofing:**

- Achieve cost efficiencies: reduce phone, paper, postage and courier charges.
- Reduce the environmental impact of sending parcels by ground transportation or air.
- Enable rapid turn-around on print jobs.

# 7

## Work with certified paper stocks:

- Paper with the Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC) mark gives your customers assurance that you have sourced sustainable paper for their print job. To apply these logos to their print material you will need to gain chain of custody certification.

# 8

## Reduce electricity consumption of print equipment:

- Power equipment down when not in use.
- Include power management in your operating procedures.

# 9

## Address building lighting, heating and cooling systems, and fuel consumption of company motor vehicles:

- Use energy efficient light globes and install light sensors.
- Insulate your facilities and investigate ways to reduce your building's reliance on heating and cooling equipment.
- Invest in more environmentally sound company motor vehicles by reviewing the Green Vehicle Guide: <http://australia.gov.au/service/green-vehicle-guide>.

# 10

## Use sound waste management practices.

- Recycle toner cartridges and bottles through return schemes.
- Minimise use of, and recycle, packaging.
- Minimise usage of hazardous and toxic materials to reduce the cost of compliance and liability associated with spills and contamination.
- Minimise water usage by fixing leaks and installing water efficient features.

# 11

## Seek equipment and consumables designed for end-of-life remanufacturing or recycling:

- Eliminate waste from landfill by using equipment and consumables that can be easily remanufactured or recycled at end of life.

# 12

## Source environmentally responsible suppliers:

- Ask for validation of the claims suppliers make.
- Be aware of the total impact of your decisions in your supply to delivery chain.

# Fuji Xerox Australia and sustainability

Fuji Xerox's long-standing commitment to environmentally responsible product design spans more than three decades, ever since Xerox introduced the first product capable of double-siding in 1969.

## Design for environment

Every piece of Fuji Xerox Australia equipment, from multifunction office devices to high volume production presses is designed with the environment in mind, enabling our customers to feel confident that they are working with an environmentally responsible business partner.

Our parent company's environmental initiatives start in the design stage of product development, where we conduct life cycle planning and incorporate technologies that:

- Eliminate the need to use hazardous material such as lead-based solder;
- Enable low energy consumption during use of the machine;
- Utilise innovative and energy efficient toner and ink technologies;
- Minimise the use of new resources; and
- Will later facilitate the remanufacture and recycling of used machines and parts.

## EA toner

Fuji Xerox has further improved its Emulsion Aggregation (EA) toner and developed an even more energy efficient 'EA-Eco toner', which can be fused to paper at a temperature more than 20 °C lower than conventional EA toner, resulting in up to a 40 % reduction in power consumption during fusion. Toner fusion is the most power-intensive process in document devices, accounting for 50 % to 80 % of total power consumed. New products (name them) employing EA-Eco toner, are achieving power savings of 15 % to 30 %.

## E-waste

Fuji Xerox takes responsibility for all end-of-life products and remanufactures or recycles them to achieve over 99 % resource recovery. The company was also first to market with products made from reused components.

All end of life equipment is returned to our Asia Pacific Integrated Recycling Centre in Thailand, where it is disassembled into over 70 categories and recycled to achieve over 99 % resource recovery. We have our own state-of-the-art remanufacture program, whereby all used cartridges and parts can be returned to our award-winning Eco-Manufacture Centre in Sydney.

In addition, we have started to work with large production customers to provide tailored returns programs to fit in with their recycling initiatives.

Our packaging need not add to your waste management load. Fuji Xerox has an environmental code of practice for packaging procurement and all product packaging is taken back from customer site and recycled.

## Responsible paper procurement

Fuji Xerox supplies a range of sustainable certified and recycled papers. We assess our suppliers' social and environmental performance and have Forest Stewardship Council Chain of Custody certification and Programme for the Endorsement of Forest Certification Chain of Custody. Our print broking business has also recently been Forest Stewardship Council Chain of Custody certified.

## Supply chain performance

Sharing common values is a strong foundation for business relationships. Fuji Xerox is a UN Global Compact signatory and board member.



# Helping customers become more sustainable

We are also committed to work with our customers to help them improve their own environmental performance. We believe strategies to achieve a more environmentally sound integrated document system should also support organisation objectives for reducing costs and increasing productivity and efficiency.

By providing advanced digital printing technology and a suite of complementary software and managed services, we help our high volume communications customers:

- Reduce environmental impact associated with traditional offset printing.
- Focus on good creative design and relevant content to increase response rates.
- Improve workflows to minimise printed output from proofing.
- Combine printing with other marketing strategies and channels.
- Ensure distribution and targeting is efficient and avoid wastage of materials and associated costs.
- Ensure paper is sustainably sourced.



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## Would you like to know more?

- Talk to your Fuji Xerox Australia account manager to learn more about practical steps you can take towards building a sustainable business.
- Download the Making High Volume Printing Sustainable white paper at [www.fujixerox.com.au](http://www.fujixerox.com.au)

### Resources

- The Paper Facts: [www.thepaperfacts.com.au](http://www.thepaperfacts.com.au)
- ISO14001 Environmental Management System <http://www.saiglobal.com/assurance/environmental/>
- ADMA Environmental Guidelines for the Australian Marketing Industry <http://www.adma.com.au>
- Good Environmental Choice Australia (GECA) website [www.geca.org.au](http://www.geca.org.au)
- Department of Environment, Climate Change and Water Print Guidelines <http://www.environment.nsw.gov.au/sustainbus/printers.htm>
- Printing Industries Association of Australia [www.printnet.com.au](http://www.printnet.com.au)
- Sustainable Green Print [http://www.printnet.com.au/pages/our\\_industry/environment\\_sub\\_pages/sgp\\_lead\\_page.html](http://www.printnet.com.au/pages/our_industry/environment_sub_pages/sgp_lead_page.html)

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## About Fuji Xerox Australia

Celebrating its 50th year of operation in Australia, Fuji Xerox is the industry's leading provider of integrated document services. The company offers a range of technology solutions and business services to meet our customers' needs for the effective management of information, from creation through to production, distribution and capture.

With knowledge and capabilities to design and implement document services for a variety of business needs across offices, print rooms, commercial printers and publishers, Fuji Xerox Australia has expertise in document management, digitising data, print, office supplies, software solutions and managed services.

The company, its management and staff are driven to create sustainable value for its stakeholders and this is reflected in our commitment to environmental responsibility and continuous improvement across all areas of our business.

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**Environment  
ISO 14001**



Protecting the environment is a fundamental component of our company's commitment to corporate citizenship. At Fuji Xerox Australia, we supply products that have been designed with both our customers and the environment in mind. As a world leader in the development of parts and components Remanufacturing Programs, we have made Eco Manufacturing an integral part of our business.

All our sites have achieved ISO 14001:2004 Environmental Management System Certification, as a demonstration of our commitment to protecting the environment.