



## INCREASING PAPER EFFICIENCY

Making more efficient use of paper is good for forests, climate and public health, good for organizational budgets and competitiveness. This factsheet highlights the successes of innovative business leaders and will help you identify opportunities to make changes at your organization or business and to achieve the benefits of increasing paper use efficiency.

### REDUCE WASTE, REDUCE COSTS

Lower paper volumes benefit your bottom line directly by reducing your purchase costs. They also have indirect cost benefits that can be 10 times the cost of the paper alone. These include reducing the costs of technology like photocopy toner and printer ink, paying for less storage space and filing equipment, slashing postage costs and saving time. Many companies find that paper reduction strategies have significant additional benefits by introducing new systems of information efficiency, which improve the quality of services by speeding up information flows.

Paper production causes a wide range of environmental impacts, so by using less of it you can press many environmental buttons at once: you can reduce your pressure on forests, cut energy use and climate change emissions, limit water, air and other pollution and produce less waste. The social impacts and human rights abuses linked to paper production will also be helped by reduced demand. A paper use policy, from ethical purchase through efficient use to recycling, is a key part of any social responsibility policy or environmental initiative at today's leading organizations.

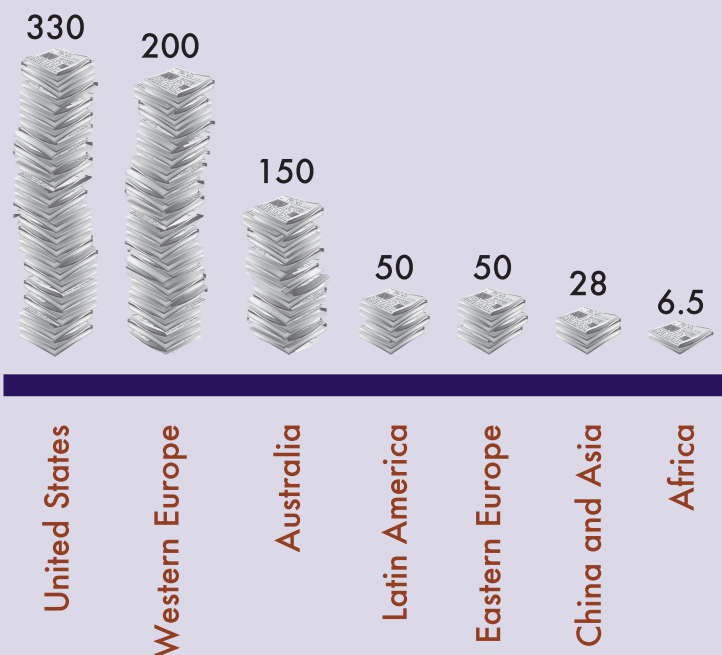
### MEASURABLE CLIMATE ACTION

The climate benefits of reducing paper consumption are significant. If, for example, the USA cut its office paper use by roughly 10 percent, or 490,000 metric tons, greenhouse gas emissions would fall by 1.45 million metric tons. This is the equivalent of taking 280,000 cars off the road for a year.

Using less paper is also about taking only our fair share of the earth's resources. Think how much better the world would be if current levels of paper production were used to make books for schools in poor nations instead of wasted office printouts and junk mail. Paper usage volumes vary

### ANNUAL PAPER CONSUMPTION

KILOGRAMS OF CONSUMPTION PER PERSON



enormously around the world: North Americans and Europeans use more than 200kg each per year, while the average African uses just 6.5kg.

## CHANGE IS GOOD

In addition, adopting efficiency measures cultivates an organizational culture of enthusiasm and productivity by helping people shift from a culture of wastefulness and disposability towards an appreciation of paper as a valuable natural resource linked to forests, fresh water, the global climate and people all around the world. A recent poll on green employment by MonsterTRAK.com found that 80% of young professionals are interested in securing a job that has a positive impact on the environment, and 92% would be more inclined to work for a company that is environmentally friendly. Below are examples of successful changes made by business leaders and some other initiatives which provide inspiration for achievement and savings at your organization.



## PACKAGING

Packaging is ubiquitous, from pizza boxes to paper cups, from supermarket cardboard cartons to micro-electronics wrappers. Its volume is growing year on year as goods travel further and producers strive for greater physical and brand protection for their goods. The global packaging industry is worth more than \$500 billion, equivalent to the GDP of the Russian Federation. In 2004, more than half of all the paper produced in the USA was used in paper packaging. It is not just big business: after purchase, it becomes a big problem. 32% of the entire USA domestic waste stream consists of containers and packaging.

## LESS IS MORE

Hewlett Packard redesigned the packaging for its office printers and discovered that taking away the package actually lowered damage to the contents. Instead of packing individual printers in robust boxes filled with complex moulded buffering, the company shifted to distributing printers to big stores in a specially designed, reusable shelving unit wrapped

only in see-through light plastic and made to be easily lifted by a fork-lift vehicle, reducing packaging volume by more than 90%. Because the fragile printers were fully visible, staff could see that they needed to handle them with care, so breakages in transit also reduced by about 5%, a real win-win.

The outdoor clothing company Patagonia used to sell long-johns in plastic bags with a cardboard tag costing 20 cents per unit, until they worked out that a paper bag was better environmentally and cost only 16 cents. But their real breakthrough came when they decided to sell the garment simply wrapped with a recycled cardboard card and two rubber bands. They say: "We call it the 'sushi roll'. It's reduced our costs to 6 cents per unit and eliminated tons of waste. As an added advantage, the exposed packaging allows customers to touch the product, which has actually increased sales."

## OFFICE PAPER

A recent study by Xerox showed that 45% of the paper printed in offices ends up in the bin by the end of the day. This less-than-one day lifespan is the fate of a trillion sheets of paper per year, worldwide. The cumulative cost of forms is staggering. In the USA, they are estimated to cost up to \$120 billion per year, yet a third of all forms are outdated before they are used, and thus end up as waste. Such examples are not only a tragedy for the trees - the longest-lived organisms on this planet - that meet this fate. It is also quite simply a pointless waste of money.

## BIG SAVERS

Citigroup, another large financial services company, worked out that if each employee used double-sided copying to conserve just one sheet of paper each week, the savings were worth US\$700,000 each year.

Bank of America reduced its paper consumption dramatically through an institution-wide campaign of online reports and forms, email, double-sided copying and lighter-weight papers. Paper used for internal operations decreased 32%, more than a billion sheets of paper, between 2000 and 2004. Reducing the basis weight of automated teller machine (ATM) receipt paper saved US\$500,000 per year. A cost cut of US\$20,000 was made on a single report, by sending out postcards notifying clients that it was available on the internet. Putting forms online was worth an estimated US\$10 million, not including the savings in postage and storage.

In the UK, the Learning and Skills Council has calculated that it can save £1 billion (US\$1.9 billion) through a system of paper-free student e-portfolios. Not only that, the feedback students get is better, their progress on courses is faster and their work placement rate improves because information quality is higher and access is so much easier online than on paper.

*“90 billion items of junk mail posted every year...this would make a stack 20,000 times the height of Mount Everest or half-way to the moon.”*

Online billing to customers can produce even more dramatic cuts. By going paper-free, AT&T cut average bill costs from US\$6.75 per bill to US\$.03, a 99% saving. British Telecom has planted trees with the financial savings it has made for every customer moving to paper-free billing; half a million customers have shifted, saving 60 million metric tons of paper.

## DIRECT MAIL

Unsolicited postal items are known officially as ‘direct mail’ but more widely called junk mail. The volume has doubled since 1990, and the vast bulk of it is trashed without being opened. The finance sector has been identified as the worst junk mail offender in the UK, with the single biggest source being a credit card company which sends out almost 100 million unrequested items per year. In the USA, the situation is even worse, with an estimated 90 billion items of junk mail posted every year. Even assuming each one is only 2mm thick, this would make a stack 20,000 times the height of Mount Everest or half-way to the moon. The US mail order sector sends out 20 billion catalogs, more than 60 for each man, woman and child in the country. Most catalog paper is made from virgin fiber and thus the mail order companies alone are responsible for consigning more than 8 million trees to the bin every year.

## MAGAZINES

On average, 60-70% of all magazines on North American and European newstands never reach the hands of a consumer. When placed end to end, the unsold magazine copies from the USA alone would circle the earth 20 times.

## TRIMMING THE WASTE

Dwell magazine has proved that paper savings are no threat to a magazine’s success. When it reduced its paper trim size, it saved sufficient money to be able to afford the switch to recycled paper, thus improving its environmental performance even further. However, a revolution is needed to tackle the scale of waste in the magazine industry which will take some radical changes in supply and distribution systems.

## TISSUE

Every day, so much tissue is used that it could stretch all the way to the moon and back. Although it serves important hygienic functions, much of the 25 million metric tons used each year is wasted and its use is growing faster than most other paper sectors. In response, a viral campaign has begun producing labels for napkin, paper towel and tissue dispensers, which point out to users that These Come From Trees. Testing of the labels indicate that each sticker can reduce wasteful tissue use by 15%, saving 100lb/45kg of paper per year, equivalent to one tree, and saving café, restaurant and other proprietors money at the same time. (Order at: <http://thesecomefromtrees.blogspot.com>)

## AT HOME

### USE THESE WEBSITES TO STOP JUNK MAIL AND UNWANTED CATALOGS



#### IN THE USA

[www.catalogchoice.org](http://www.catalogchoice.org)  
[www.dmachoice.org/cgi/offmailinglist](http://www.dmachoice.org/cgi/offmailinglist)  
[www.41pounds.com](http://www.41pounds.com)  
[www.greendimes.com](http://www.greendimes.com)  
[www.stopjunk.com/](http://www.stopjunk.com/)

#### IN THE UK

[www.mpsonline.org.uk/](http://www.mpsonline.org.uk/)

#### FOR BUSINESSES

[www.ciwmb.ca.gov/BizWaste/OfficePaper/MailReduce.htm](http://www.ciwmb.ca.gov/BizWaste/OfficePaper/MailReduce.htm)

## WHAT YOU CAN DO

### 4 STEPS TO PAPER EFFICIENCY

1. Make paper use efficiency a company priority and identify a champion to lead the effort.
2. Carry out an audit of paper procurement and use. Examine your office and production routines.
3. Identify opportunities for easy savings by encouraging and rewarding ideas from staff and partners.
4. Calculate environmental savings using the paper calculator (<http://www.papercalculator.org>) and celebrate them.

## WORKPLACE PAPER SAVING TIPS

- Post reminders to staff to think about saving paper.
- Set computer and copier defaults to print double-sided.
- Reduce the default width of margins in Microsoft Word (<http://changethemargins.com>)
- Put reports and forms online rather than producing printed versions.
- Use lower weights of papers.
- Invest in technology like use of the internet, email and duplex printers.
- Seek more efficient design of products and packaging.



### FIND OUT MORE

<http://www.shrinkpaper.org>

(Sign the worldwide pledge to use less paper.)

<http://rreuse.org>

(A European network on re-use and recycling.)

<http://www.udel.edu/topics/printless/how.html>

(Paper saving tips from a USA university perspective.)

<http://eetd.lbl.gov/paper/>

(More paper saving tips, including how to measure paper use.)

<http://www.forestethics.org/downloads/reduce.pdf>

(ForestEthics' Business Guide to Paper Reduction.)

[http://www.panda.org/about\\_wwf/what\\_we\\_do/forests/what\\_you\\_can\\_do/business/reducing\\_paper](http://www.panda.org/about_wwf/what_we_do/forests/what_you_can_do/business/reducing_paper) (WWF's Paper Guide.)

<http://www.printgreener.com>

(Greenprint – saving a million trees through smart printing.)

The Environmental Paper Network (EPN) links environmental organizations that collaborate to support the conversion of the pulp and paper industry to socially and environmentally sustainable processes. The EPN's Common Vision outlines four key criteria for environmental paper purchasing policies:

- 1) Reduce paper consumption,
- 2) Clean production,
- 3) Responsible fiber sourcing, and
- 4) Maximize recycled content.

For more information visit [www.environmentalpaper.org](http://www.environmentalpaper.org).

