



TWO SIDES

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PRINT AND PAPER
HAVE A GREAT
ENVIRONMENTAL
STORY TO TELL

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'The Paper Industry has eight representatives in the UN's list of the world's 100 most sustainable companies, more than any other industry.'

Australian Paper Industry Association 2008

PAPER HAS BEEN AROUND FOR ALMOST 2000 YEARS, AND DURING THIS TIME IT HAS UNDOUBTEDLY ESTABLISHED ITSELF AS THE MOST EFFECTIVE AND VERSATILE MEANS OF COMMUNICATION. EVEN IN TODAY'S DIGITAL AGE WITH THE VAST RANGE OF ALTERNATIVE MEDIA TO CHOOSE FROM, PAPER'S UNIQUE ARRAY OF PRACTICAL AND AESTHETIC QUALITIES SIMPLY CAN'T BE MATCHED BY USING ELECTRONIC ALTERNATIVES.

Environmental concerns have moved to the top of almost every agenda in recent years, and have an increasing influence over the decisions we make every day. As the environmental debate has gathered momentum, so have the myths and misconceptions suggesting that the paper industry is responsible for mass deforestation and has an adverse impact on the environment. It doesn't.

As always, there are two sides to every debate, and paper has a great environmental story to tell. This is an industry that depends on a renewable source for its principal raw material, and one that leads the world in recycling.

Initiated by the National Association of Paper Merchants (NAPM), 'Two Sides' presents the real facts about paper production, use and recycling. The aim of the initiative is to dispel the misconceptions surrounding paper to promote more informed and confident decisions as well as a more responsible use of paper and print as a unique communications medium.

'Our mood will improve by up to 29% if exposed to a positive tactile feeling'

Royal Mail

Life without paper would be hard to imagine. It would certainly be dull.

Today, the choice of paper is endless. Paper made from virgin fibres, recycled papers, textured and coloured ranges of varying stocks and weights, all offer a solution for every communications need. The vast and rich attributes of paper have not only stood the test of time, they have evolved with time and, combined with the wide ranging methods of printing techniques that are now available, bringing messages, words and pictures to life in a way that electronic media fails to do.

Some would argue that all these benefits are outweighed by the mass of misleading claims about environmental disadvantages;

shrinking forests, excessive energy consumption, and overflowing landfill sites. So far as the environment is concerned, paper can appear bad.

It isn't and many of these claims are misleading. Paper isn't the enemy of the environment and it doesn't have to cost the earth. While paper does use trees, its production does consume energy and too often, waste paper ends up in landfill sites, it is also one of the few truly renewable and recyclable raw materials we have.

The paper industry is facing up to its responsibilities and investing heavily in all areas of production and sourcing of raw materials to minimise its environmental impact.

'Over 90% of media buyers agree the general public lacks understanding of the environmental impact of paper'

NAPM Survey of media buyers, July 2008

The NAPM strongly supports:

- Responsible Production
- Responsible Print and Design
- Responsible Consumption
- Responsible Disposal



THE MYTH:
MAKING PAPER DESTROYS FORESTS.

THE FACT:
NO, IN FACT, THE OPPOSITE IS TRUE.



THE MAIN CONSTITUENT OF PAPER IS CELLULOSE FIBRE WHICH GENERALLY COMES FROM TREES, BUT THIS DOESN'T AUTOMATICALLY EQUATE TO THE DESTRUCTION OF FORESTS. PAPERMAKING AND OTHER INDUSTRIES THAT DEPEND ON TREES NEED THRIVING FORESTS. IT'S IN THEIR INTEREST.

'Almost half of the timber harvested from the world's forests is used to make paper products, so the paper industry has a huge opportunity to make sure that those forests are responsibly managed and will be here for generations to come'

FSC

In managed forests, for every tree cut down, three to four are replanted in its place. It's estimated that there are 25% more trees in the developed world today than there were in 1901, and in Europe alone, forests are increasing annually by an area equivalent to more than 1.5 million football pitches.¹

Deforestation is generally occurring in the tropics but for a variety of reasons. The main cause of deforestation is either for agriculture or for domestic fuel requirements, which between them, account for almost half of the trees cut down worldwide.²

There have been, and continue to be in some tropical countries, issues over land rights and natural forest conversion to industrial plantations which are cause for concern to the paper industry, NGOs and consumers alike.

The 'Two Sides' initiative supports a reduction in such activity and recognises the need to support products which can clearly be traced to sustainable sources.

In northern Europe, where almost all ancient forests are protected, paper comes from managed semi-natural forests where the cycle of planting, growing and logging is carefully controlled. Even in countries where natural forests are used, like Russia and Canada, logging accounts for only a tiny share of the annual tree growth.

'Forestry, paper and packaging are among the most sustainable industries in existence'

CEO Perspectives 2008, Price Waterhouse Coopers

One of the many unique things about paper is that its main raw material, is renewable. Combined with the sustainable way that European forests are managed, this means that 33% more new trees grow in Europe each year than are felled.³

THE MYTH:
PAPER IS BAD FOR
THE ENVIRONMENT.

THE FACT:
NO, PAPER IS
ONE OF THE FEW
TRULY SUSTAINABLE
PRODUCTS.

FOR EVERY TREE THAT IS LOGGED IN MANAGED FORESTS, THREE TO FOUR TREES ARE REPLANTED. AND AS YOUNG TREES GROW, THEY ABSORB CO₂ FROM THE ATMOSPHERE. FURTHERMORE, AS A WOOD PRODUCT, PAPER ALSO CONTINUES TO STORE CARBON THROUGHOUT ITS LIFETIME.

Fortunately, the paper industry has a number of respected certification schemes ensuring the paper you use has come from a sustainable forest source. There are some 30 schemes in existence, but the two main auditable certifications that have emerged are the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC).

At the moment too few of the world's forests are formally certified but the NAPM actively supports certification programmes and believe these provide consumers with reassurance.

'The amount of carbon stored in products is increasing by about 540 million tons of CO₂ per year'

NCASI Special Report 07-02



FSC (Forest Stewardship Council) provides global standards for forest management which cover a balance of environmental, social and economic aspects. The wellbeing of forest communities and ecosystems is as important as replacing trees in ensuring the future of the world's forests. The FSC system also provides a way of tracking forest products through independently verified Chain of Custody certification. This has to cover every stage in processing, conversion, distribution and printing before the final product can carry the FSC label.



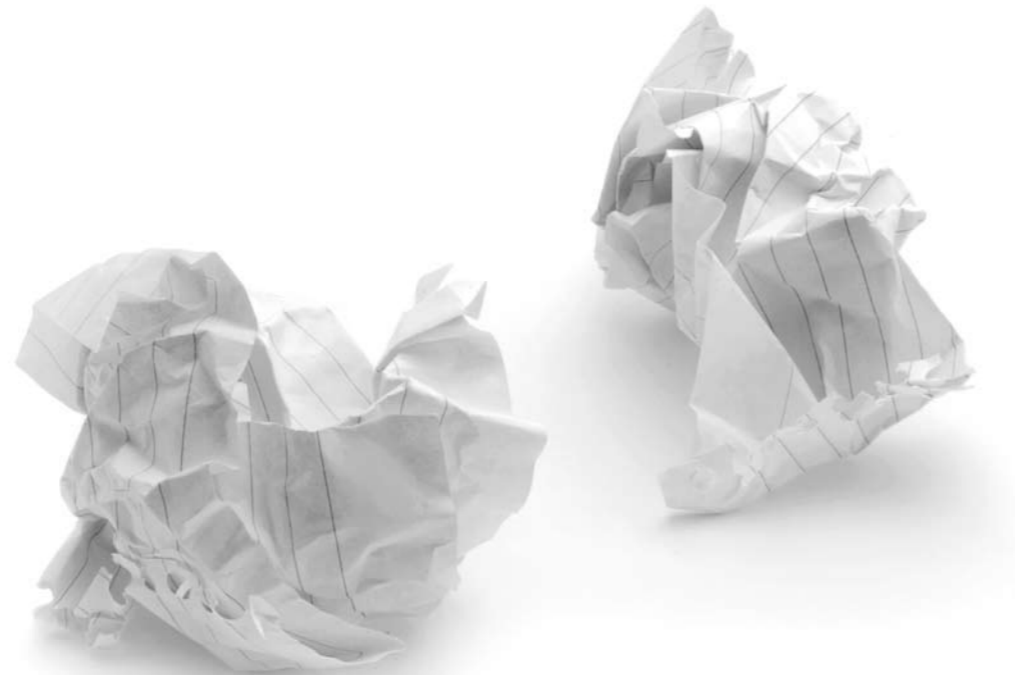
PEFC The PEFC Council (Programme for the Endorsement of Forest Certification schemes) is an independent, non-profit, non-governmental organisation, founded in 1999 which promotes sustainably managed forests through independent third party certification. The PEFC provides an assurance mechanism to purchasers of wood and paper products that they are promoting the sustainable management of forests.

- Paper production is not a major cause of deforestation
- Industrial wood, pulp and paper production saves forests
- Paper is a fully renewable, sustainable resource
- For every tree logged in managed forests, 3-4 are replanted
- Forest certification promotes wood from managed forests
- We plant more trees than we harvest for making paper
- The annual increase of forest cover in Europe is equivalent to more than 1.5million football pitches



THE MYTH:
THE PAPER I USE
CONSUMES A
VAST AMOUNT
OF ENERGY.

THE FACT:
IT DOESN'T.



PEOPLE MISTAKENLY THINK PAPER MAKING IS A VORACIOUS ENERGY CONSUMER. BUT LOOK MORE CLOSELY AND YOU'LL DISCOVER SOME SURPRISINGLY SMALL STATISTICS ABOUT PAPER AND ENERGY...

As industries go, paper making is a large scale undertaking and you'd expect it to generate some frightening statistics. It doesn't. On average it takes 500 kilowatt-hours (kWh) of electricity to produce 200kg of paper, the average amount of paper that each of us consume each year.

'The European pulp and paper industry is strongly in favour of renewable energy and has declared an intent that commits the industry to increase the share of biomass-based energy in its total primary energy consumption from 49% in 2001 to 56% in 2010'

CEPI

Does 500 kilowatt-hours sound a lot? It's the equivalent to:

- Powering one computer continuously for five months
- Burning a 60w light bulb continuously for one year
- The energy consumed by a typical household leaving its electronic equipment on stand-by for a year

Paper & the Environment,
ATS Consulting August 2007



THE MYTH:
PAPER HAS A
HIGH CARBON
FOOTPRINT.

THE FACT:
IT'S NOT AS HIGH
AS YOU THINK!

PRODUCING 200KG OF PAPER, THE AVERAGE WE EACH USE EVERY YEAR, CREATES BETWEEN 130–250KG OF CO₂ DEPENDING ON THE SOURCE OF ENERGY. THIS IS COMPARABLE TO MANY OTHER SMALL SCALE DOMESTIC ACTIVITIES, AND IS ROUGHLY EQUIVALENT TO THE CO₂ PRODUCED BY AN AVERAGE FAMILY CAR OVER A DISTANCE OF 600 MILES.⁴

While the main raw material of paper, trees, is a vast carbon store and the prime absorber of carbon dioxide from the atmosphere, the precise carbon footprint of the paper cycle is difficult to pinpoint as it depends on how the paper is made and the source of energy used in production. Nuclear, hydro, biofuel and geothermal energy, heavily used by some paper making countries, are all low carbon, while fossil-fuels are carbon intensive.

'A sustainably managed forest can be relatively carbon neutral if logging is balanced with re-growth'

The Sustainable Procurement of wood & Paper products:
An introduction. www.sustainableforestprods.org

'Globally, individual forestry is estimated to result in the absorption of 1 billion tonnes of CO₂ per annum'

Australian Paper Industry Association (APIA)

Definition: A Carbon Footprint is a measure of the impact that human activities have on the environment in terms of the amount of CO₂ and other greenhouse gases released into the atmosphere, that have arisen through the manufacture and distribution of a product or service.

'Reading a newspaper can consume 20% less carbon than viewing news online'

Swedish Royal Institute for Technology

- A single person reading a daily printed newspaper in Europe uses the equivalent of 28kg of CO₂ per year⁵
- For a person reading web-based news for 30 minutes a day, the global warming potential is the equivalent of 35kg per year⁶



THE MYTH:
RECYCLED PAPER IS
ALWAYS BETTER FOR
THE ENVIRONMENT
THAN VIRGIN PAPER.

THE FACT:
NOT NECESSARILY.



ACCORDING TO A SURVEY OF PROFESSIONAL MEDIA BUYERS, 70% OF RESPONDENTS PERCEIVED RECYCLED PAPER TO BE BETTER FOR THE ENVIRONMENT THAN VIRGIN PAPER.⁷

It isn't as straightforward as you might think. While recycled paper does reduce waste paper going to landfill, you must also consider paper's full life cycle and not just the fibre source. Modern paper mills producing virgin fibre paper, whose energy source is nuclear, hydro or internally bio-fuelled, may well have a lower carbon footprint than a mill making recycled paper, powered by fossil fuels. And it's important to remember that virgin fibre is always required to make recycled paper possible in the first place. For these reasons, it is very difficult to directly compare the environmental impact of recycled and virgin fibre paper.

'The paper industry has eight representatives in the UN's list of the world's 100 most sustainable companies, more than any other industry'

Promotion of Paper
Australian Paper Industry Association, 2008

Both virgin and recycled paper products can therefore have an equally strong environmental argument. Forests are part of the cycle that helps remove CO₂ from the atmosphere. This extends from trees to wood and paper products, which continue to store the carbon and help to reduce climate change. The fact that paper products are recyclable and renewable means that their lifecycle can be extended, prolonging this benefit and reducing waste into the bargain.⁶

Like so many stories, there are two sides to the story of paper, but the more you know, the better placed you are to make the right decision.

- The paper industry is one of the biggest users of renewable, low carbon energy⁸
- Half the energy used to make paper in Europe comes from renewable sources⁹
- Very often, the water used to make paper is cleaner when it comes out of the mill than when it goes in¹⁰
- Growing forests absorb carbon dioxide helping to counter the Greenhouse Effect¹¹



THE MYTH:
PAPER CONTRIBUTES
SIGNIFICANTLY TO
LANDFILL.

THE FACT:
WHILE PAPER DOES
STILL CONTRIBUTE
TO LANDFILL,
THE AMOUNT
IS REDUCING
DRAMATICALLY.

THE PAPER INDUSTRY IS
EUROPE'S LARGEST RECYCLER
AND IS ONE OF THE GREATEST
ENVIRONMENTAL SUCCESS
STORIES OF RECENT YEARS.



Today, the average recycling rate across European countries is over 62%, representing more than 50 million tonnes of used paper collected each year.¹²

Paper fibres can be recycled up to six times, and recycling is certainly the best way to keep waste paper out of landfill.

Where the UK is unable to use all the waste fibre collected, the material is exported, thus reducing the worldwide need for virgin fibre.

So paper has excellent credentials as a renewable, sustainable and recyclable product, and managed paper production has a positive environmental impact. At the same time, a responsible use of paper and attitude to recycling will have an even greater environmental benefit.

'When people use more paper, suppliers plant more trees. If we want bigger commercial forests, then we should use more paper not less. Our policies should directly protect important wildlife habitats, not try to reduce our demand for paper.'

Edward L. Glaeser, professor of economics at Harvard University © Copyright 2007 Globe Newspaper Company

- Paper fibres can be recycled up to six times¹³
- Paper is truly sustainable, with waste fully recoverable ready for recycling into new paper
- Since 2001, there has been a 60% increase in the amount of household waste paper and card collected for recycling¹⁴
- The UK exports over 5 million tonnes of waste paper for re-processing¹⁵



As you have now read, there are two sides to paper and you should now feel confident about using it. Paper is renewable, recyclable and produced by an environmentally-conscious industry whose future depends on planting more trees than it consumes and which is progressively improving standards in the whole supply chain.

This booklet can only scratch the surface of all the issues surrounding the responsible use of paper, print and packaging.

To know more about the production and consumption of paper and its impact upon the environment, go to the 'Two Sides' website and find links to many interested organisations who cover the whole spectrum of opinions.

'There aren't many industries around that can aspire to becoming genuinely sustainable. The paper industry, however, is one of them; it is inherently sustainable.'

Jonathan Porritt, Chairman UK Sustainability Development Commission & Founder Forum for the Future

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'Two Sides' is an NAPM-led Initiative

The National Association of Paper Merchants, NAPM, is an industry body representing all the UK major paper distributors.



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