Print and Paper Myths and Facts

BCF

BRITISH COATINGS FEDERATION

Print and Paper have a great environmental story to tell

TWO SIDES

www.twosides.info

When it comes to the sustainability of Print and Paper, it's important to separate verifiable facts from opinion and misleading information. This booklet is designed to provide you with relevant and balanced information – we call it informed choice.

Two Sides is an organisation which is committed to promoting the responsible production, use and recovery of Print and Paper. Two Sides dispels common environmental misconceptions by providing users with verifiable information on why Print and Paper is an attractive, practical and sustainable communications medium.

"The British Coatings Federation, which represents the UK printing inks manufacturers, is a signed up supporter of the Two Sides initiative, and will continue to promote the Two Sides message."

Tom Bowtell, Chief Executive, British Coatings Federation

What a great, sustainable idea.

"For sheer flexibility, style and effectiveness, Print and Paper can be the natural choice for sustainable and powerful communications."

The British Coatings Federation has partnered with Two Sides, which is a global initiative with membership right across the graphic communications value chain; from forest to print and on to recovery and recycling. Two Sides promotes the responsible use of Print and Paper which, when sourced from certified or sustainably managed forests, is a uniquely powerful and natural communications medium.

In recent years, the wider business community has evolved. It has developed an increased awareness of corporate responsibility issues and assumed its share of responsibility and accountability for maintaining standards of ethical, social and environmental performance.

Two Sides recognises that the industry has a responsibility to continually improve its environmental credentials and address customer concerns, which are often the result of misleading or inaccurate information.

The Two Sides initiative sets out the facts in a clear and straightforward manner; addressing some of the inaccuracies and issues that surround the industry. There is an appetite by those working within the Graphic Communications channel to understand all the environmental issues and thus make more informed decisions about the use of Print and Paper products.

Print and Paper has been the preferred communications medium for 2,000 years. In a multimedia world, it continues to be highly effective and, used responsibly, is inherently sustainable.

Two Sides seeks to ensure that, by fostering a better understanding of our industry's environmental credentials, Print and Paper, through its myriad of uses from commercial applications to the basis of learning and creativity, remains an essential communication medium.

Membership

Membership of Two Sides shows that your organisation regards environmental awareness as an essential part of the business strategy. Benefits of membership include access to materials and information, helping your business to communicate its sustainability to clients and staff, as well as participating in an initiative which sets out to dispel many of the myths that surround our industry.

Find out more **www.twosides.info/join-us**

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The Myth

European forests are shrinking

The Fact

European forests have been growing by over 1,500 football pitches every day

Between 2005 and 2015, European forests grew by 44,000 Square Kilometres - that's an area bigger than Switzerland and amounts to over 1,500 football pitches everyday!

FAO data, 2005-2015

"The most common pressures causing deforestation and severe forest degradation are: large and small-scale agriculture; unsustainable logging; mining; infrastructure projects; and increased fire incidence and intensity"

WWF Living Forests Report Chapter 5: Saving Forests at Risk, 2015

50% of the world's wood harvest is used for energy and 28% for construction. There are some other uses but paper only directly takes 13%

Derived from FAOSTAT, 2015

In some countries, particularly in the tropics, there are issues over land rights and natural forest conversion to industrial plantations which are a cause of concern to the paper industry, NGOs and consumers alike.

"Forests play an important role in the conservation of biological diversity. The area of protected forests in Europe increased by around half a million hectares annually between 2000 and 2010. Half of the protected forests are managed for conservation of biodiversity."

EEA, The European Environment — State and Outlook, 2015

The Two Sides initiative supports solutions to these problems and recognises the need to support products which can clearly be traced to sustainable sources.

"84% of our raw materials come from Europe."

CEPI Sustainability Report, 2015

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. Historical concerns in northern Europe and Canada have now been largely resolved through co-operation between legislators, campaigners and forest industries to protect ancient forests.

"The area under forest management certification has continued to increase, from 18 million ha under internationally verified certification in 2000 to some 438 million ha in 2014."

FAO Global Forest Resources Assessment, 2015

The Myth

Planted forests are bad for the environment

The Fact

Well-managed planted forests reduce the pressure on natural forests and can provide many other environmental benefits

Forests are essential for the transition to the green economy. Well managed planted forests are a vital element in the global forestry mix.

Natural forest accounts for 93% of world's forest area with planted forest occupying 7%, or 290 million hectares.[1]

Planted Forests:

- In Europe, are not replacing natural forests
- Can be more productive and can grow faster than natural forests
- Can be independently certified
- Can provide new recreational facilities
- Can prevent soil degradation and erosion
- Provide new habitat shade and shelter for wildlife
- Contribute to rural development

"Well-managed planted forests can be useful in providing various forest goods and services and helping to reduce the pressure on natural forests."

FAO Global Forest Resources Assessment, 2015

"Planted forests can be environmentally sound sources of renewable energy and industrial raw material."

WWF, Living Forest Report, 2012, Ch 4

Planted Forests can be well managed. Initiatives such as the FAO Guidelines for Responsible Forest Management of Planted Forests and forest certification can help maintain ecosystems and biodiversity, protect High Conservation Values, involve multiple stakeholders and aid economic development.

Worldwide re-forestation will require expansion of a range of plantation types.

- The WWF Living Forests Model projects that around 250 million hectares of new tree plantations for all end uses might need to be established by 2050 due to population and GDP growth
- 11 million of those might be needed in Europe
- The paper Industry is one user of many, including lumber and, increasingly, biofuels

WWF, Living Forest Report, 2012, Ch 4

The Myth

Paper is bad for the environment

The Fact

Paper is one of the few truly sustainable products

Paper is based on wood, a natural and renewable material. As young trees grow they absorb CO_2 from the atmosphere. Furthermore, as a wood product, paper also continues to store carbon throughout its lifetime.

The paper industry has a number of respected certification schemes ensuring the paper you use has come from a sustainable forest source. 2.1 billion ha, or 52% of the world's forests, are under management plans.[1] The two most recognisable certifications are the Forest Stewardship Council (FSC®) and the Programme for the Endorsement of Forest Certification (PEFC®).

FSC® (Forest Stewardship Council) FSC® 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.

Forests play an important role in mitigating climate change by absorbing carbon from the atmosphere. Europe's forests store almost 80 billion tonnes of carbon in their biomass. The stock of carbon in forest biomass has increased by around 3 billion tonnes since 1990. This means that forests absorb around 7% of the annual greenhouse gas (GHG) emissions from the region.

EEA, The European Environment - State and Outlook, 2015

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.

Sustainability Facts.

- Paper is made from wood, a truly renewable and sustainable resource
- Forest certification ensures wood comes from well managed forests
- Responsible wood, pulp and paper production ensures healthy growing forests
- Between 2005 and 2015, European forests grew by an area the size of Switzerland[1]
- In 2013, 74.7% of pulp delivered to paper and board mills in Europe was forest management certified by independent forest certification schemes, up from 71.1% in 2010[2]
- The potential supply of certified forest products increased by about 30% between 2007 and 2013[3]

The Myth

Paper production is a major cause of global greenhouse gas emissions

The Fact

Most of the energy used is renewable and carbon intensity is surprisingly low

The paper, pulp and print sector is one of the lowest industrial emitters of greenhouse gasses, accounting for 1% of global greenhouse gas (GHG) emissions.

Ecofys, 2013

The European pulp and paper industry produces original bio-based products using wood, a renewable material. It is also the biggest single industrial user and producer of renewable energy in the EU: 56% of the industry's total primary annual energy consumption is biomass-based.

And the industry has the potential to do even more in the future. It has the experience, technology and supply chain to play a big part in the bioeconomy and to do so in a resource-efficient manner.[2]

The CO_2 emissions of the European pulp and paper industry reduced by 22% between 2005 and 2013.

CEPI Key Statistics, 2014

The Pulp, Paper and Print sector is one of the lowest industrial greenhouse gas emitters.

Manufacturing industries account for 29% of global greenhouse gas emissions:

• Non-metallic minerals	6.0%
• Iron and steel	4.8%
• Chemical & petrochemical	4.3%
• Non-ferrous metals	1.4%
• Food & tobacco	1.1%
• Pulp, Paper and Print	1.0%
• Other industries	10.5%

Ecofys, 2013

The environmental impact of our personal paper consumption may not be as high as you think either.

In Europe, we each use 156 kg of paper every year.[i] This amount of paper produces 100 kg of CO_2[ii] which is equal to driving 500 miles in the average European car.[iii]

By buying paper from sustainably managed forests and always recycling, we really do not have to feel guilty about using this natural and renewable product.

[i] The Swedish Forest Industries, 2013
[ii] EURO-GRAPH Statistic
[iii] European Commission, 2015

The Myth

Only recycled paper should be used

The Fact

Virgin fibres from sustainably managed forests are needed to maintain the paper cycle

Without new fibres, from new trees, the paper cycle cannot be maintained. Recycled fibres degrade after several uses and the paper industry needs fresh fibre from responsibly managed forests to keep the renewable cycle going.

Europe is the world leader when it comes to recycling paper. 72% of our paper is now recycled. This means more recycled fibres are being used as a raw material by Europe's paper producers. In 1992, paper for recycling made up 35% of raw material, compared to 51% virgin fibre. In 2014, 46% of raw material was recycled fibre and 39% was virgin fibre.[4]

This growth in recycled fibres being used has slowed down in recent years as total paper for recycling in Europe reaches nearer to its practical maximum (see p.13). It is therefore likely that the current balance of recycled and virgin fibres will remain steady.

Some paper grades such as newsprint and packaging materials utilise up to 100% recycled fibre. However, due to high quality requirements, paper for recycling is not suitable for use in all paper grades, such as fine paper. Even though fine paper is seldom made from recycled fibres, it is itself an excellent and important source of raw material in the paper recycling process.

EURO-GRAPH, Paper and Environment Brochure

It is very difficult to directly compare recycled fibre with virgin fibre as both are fundamental to the paper making process.

Recycled paper can be used in some grades more than others. For example, newsprint is usually made with 100% recycled fibre. High grade graphical papers, however, have a lower utilisation rate, around 12%,[4] but when recycled, inject the cycle with virgin fibres.

The paper making process really is a sustainable cycle. Recycled fibres are used as effectively as possible, whilst new fibres are constantly brought in to replenish and maintain the process.

Collecting paper for recycling, ensuring fibres remain available for remanufacture, is key to sustainability.

- When buying paper, whether recycled paper or virgin paper, ensure that it is made with wood from sustainably managed forests
- Virgin fibre grades are needed to continue the cycle
- Recycled fibres degrade after several uses

The Myth

Print and Paper
is a wasteful product

The Fact

Paper is one of the
most recycled products
in the world

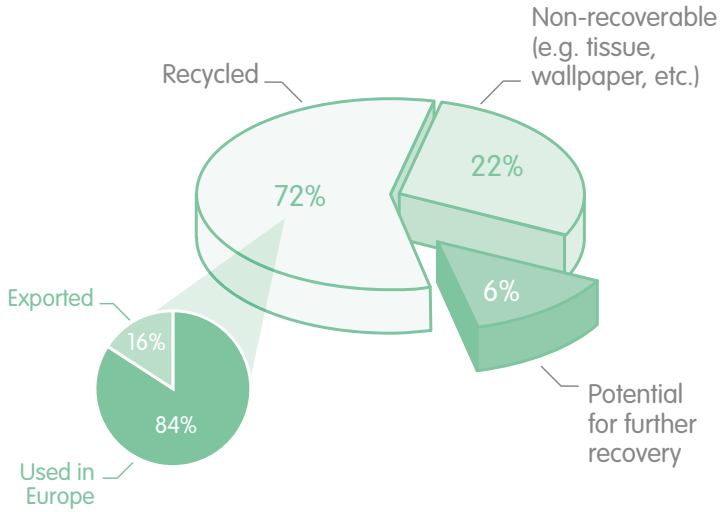
The European recycling rate for paper reached 72% in 2014 - that amounts to 2 tonnes of paper being recycled every second!

European Declaration on Paper Recycling, Monitoring Report 2014

The European paper industry is a leading recycler and, with local collecting systems improving, will increase its recycling rates even further.

In some regions, recycling rates range from 70-75%, which is likely the practical maximum recycling rate. Some paper products cannot be recovered for recycling because they are kept for long periods of time (books) or archived (records); others are destroyed or contaminated when used (e.g. tissue and hygienic paper).[5]

Recovery of European Print and Paper waste products (CEPI statistics)



"Two Sides members support the implementation of effective recycling schemes and the minimisation and eventual elimination, of print and paper waste in landfill."

Two Sides Membership Charter, 2016

Paper is recycled, on average, 3.5 times a year in Europe, while over 50% of the raw material for Europe's paper industry is paper for recycling. Paper cannot be recycled indefinitely as fibres get too short and worn out to be useful in creating a new sheet of paper. More importantly, the production cannot be based on 100% recycled fibre as 100% of consumption cannot be collected and as Europe is also a global net exporter of paper which is consumed and collected outside of Europe. The cycle must therefore constantly be refilled with new fibres.[2]

Two Sides encourages responsible paper consumption. Double-sided printing in the office and separate collection schemes will reduce costs and improve sustainability.

The Myth

Electronic communication is more environmentally friendly than paper-based communication

The Fact

Electronic communication also has environmental Impacts

"Go Paperless", "Go Green" and "Save Trees" are common messages seen these days as many organisations encourage their customers to switch to electronic transactions and communications. But are these appeals based on fact?

These sort of messages give the impression that electronic communication is more environmentally friendly than traditional, paper-based communication. But it is very difficult to make such a statement without considering the full lifetime of those different mediums.

As has been discussed throughout this booklet, paper is a uniquely renewable and sustainable product. The main raw material, wood, is grown and harvested in a carefully controlled and sustainable way - so sustainable, in fact, that European forests, where most of the raw material comes from, have grown by an area the size of Switzerland in just 10 years.[6]

The environmental impacts of our ever-increasing digital world cannot be ignored. The ICT industry accounts for approximately 2% of global emissions, on par with emissions from the global aviation sector.[7]

Businesses and individuals are increasingly using 'cloud' services. These mega data-centres store almost everything we do online; including our web searches, our social media posts and our online statements.

"If compared with the electricity demand of countries in the same year, the cloud would rank 6th in the world, with demand expected to increase 63% by 2020."

Greenpeace, 2014

Each year, the electronic industry - one of the world's largest and fastest growing - generates up to 41 million tonnes of e-waste from goods such as computers and smart phones.

United Nations Environment Programme (UNEP), 2015

When it comes to communication, whether it's electronic or traditional mediums, consumers must be informed about the environmental impacts of those activities.

Two Sides advises businesses to be transparent about the carbon footprint of all their services.

Tackling Greenwash

In November 2015, a campaign by Two Sides found 240 of the world's largest organisations to be using greenwash statements in their marketing communications.

70% of those companies changed or removed these misleading messages as a direct result of intervention by Two Sides.[8]

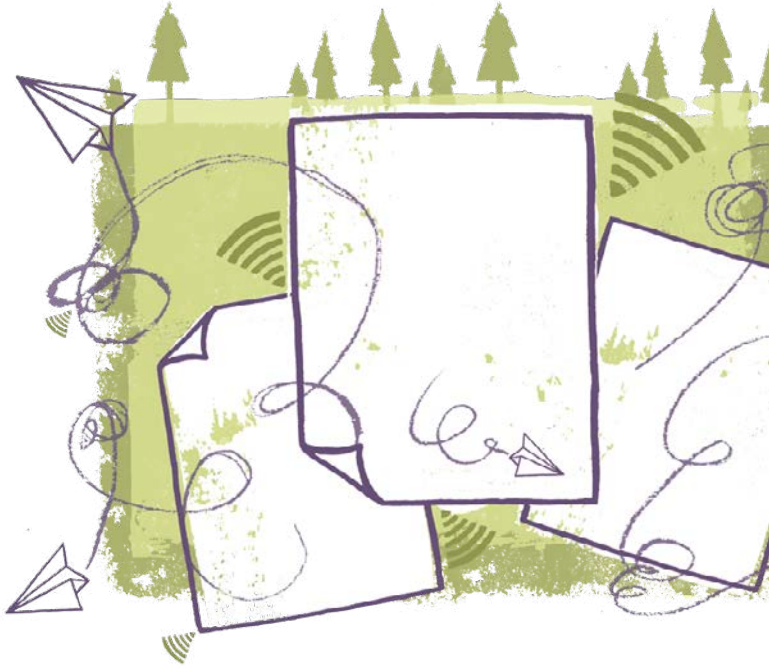
It is important to mention that not all greenwashing is due to purposely misleading customers. Often it is down to genuine and common misconceptions about Print and Paper. It is Two Sides' role to educate both consumers and businesses alike.

The Myth

Digital is always the preferred means of communication

The Fact

Many consumers still value paper-based communication



Many organisations, banks, utilities, telecoms and governments are now increasingly going online or making charges if their customers wish to receive paper-based communication.

But switching to digital is not always welcome.

84% of consumers do not like it when companies take away their right to choose how they are communicated with.

Keep Me Posted UK, Opinium, 2013

Two Sides understand the value and convenience of the digital revolution but believe that citizens must continue to have a right to receive paper-based communications, particularly bills and statements, without penalties, supplementary charges or difficulty.

87% of consumers agree that the main reasons companies want to shift to electronic delivery, is to save money – not to be environmentally responsible.

Two Sides and Toluna, 2013

Independent findings from UK Opinium Research reveal that often the most vulnerable members of society are those most dependent on traditional, postal, transactional mail. The move to an online-only society risks leaving older people, the disabled, rural dwellers and those on low incomes disconnected.

"The access to basic banking services and traditional means of payment, such as cash payments or paper-based transactions, must become a universal right."

Evelyn Gebhardt, MEP, European Foundation for Financial Inclusion, May 2013

- 19% of European households don't have access to the internet
- Only 18% of rural areas in the EU have 30 mbps broadband
- 43% of those connected to the internet said that speeds were insufficient.

Eurostat, 2014
European Commission, May 2013
Eurobarometer, Jan 2014

"60% of citizens would not choose a company which does not offer a paper bill."

Keep Me Posted EU, 2014

It is important for policy makers to acknowledge that information on paper is preferred by many consumers and often receives more attention. Consumers wish to retain the flexibility of postal and electronic communications.

84% of people believe that they understand and can retain or use information much better when they read print on paper

Two Sides and Toluna, 2015

In reality we live in an increasingly digital world where electronic and paper-based communications coexist and are often complementary. Communication strategies must not only be cost effective but also recognise citizen choice. There are many tangible benefits that paper-based documentation can bring and its preference as a means of communication by many consumers must be at the forefront of any digital planning.

The Myth

Packaging is wasteful and unnecessary

The Fact

Paper-based packaging protects goods, reduces waste and is recyclable

Packaging reduces waste. Recycling waste paper and packaging responsibly reduces litter and landfill.

Paper-based packaging can be part of a solution against global food wastage – which amounts to as much as 1.3 billion tonnes – one third of food produced worldwide for human consumption – by minimising wastage and food damage along the chain.

FAO, 2016

The primary function of packaging in all its forms; plastics, tins, glass and paperboard is to protect goods whilst in transit, storage and distribution. It prevents waste through breakage, spoilage and contamination, and extends product shelf life. A secondary, but important, purpose is to provide consumer information about the product and help with brand identity and differentiation. Minimizing waste, particularly food, is a vital global challenge.

Paper-based packaging protects and informs, and comes in all shapes and sizes – often commonly recognised as Corrugated or Cartons.

Corrugated:

- is one of the largest sectors within the packaging industry
- accounts for almost 30% of all packaging used and remains the most commonly used packaging material.
- protects around 75% of the UK's packaged goods in transit.[9]

Cartons:

- carry vital consumer information; legal, nutritional, safety, etc.
- can carry addition features like Braille, RFID
- allow high quality imagery to enhance product appeal

Paper-based packaging.

- In the EU, more paper-based packaging is recycled than any other packaging material combined.[10]
- Efficient packaging reduces damage in transit to below 5%
- It prevents waste through breakage, spoilage and contamination, and extends product shelf life.
- Provides consumer information about the product and acts as a means of brand differentiation.

Paper-based packaging has an excellent environmental record. On average, UK manufactured corrugated boxes contain 76% recycled fibre. Once used, paper-based packaging is easy to recycle. In the UK and Europe, the collection of packaging is hugely successful with over 80% collected for recycling.[11] This superb recycling rate prevents an area of board the size of Greater London from going to landfill every four months.

Consumers prefer paperboard packaging. According to a recent survey,[12] 57% of UK consumers prefer paper-based packaging

From newspapers to magazines, from photocopies to leaflets, we believe Print and Paper cannot be beaten for sheer flexibility, impact and sustainability.

As you have read, there are two sides to paper and you should now feel confident about using it. Paper is made from renewable resources, 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 learn more about the production and consumption of paper and its impact upon the environment, go to the Two Sides website and discover the facts about our industry.

www.twosides.info

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

CEO Perspectives, PricewaterhouseCoopers

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The British Coatings Federation is the sole UK Trade Association representing the interests of the decorative, industrial and powder coatings, printing inks and wallcovering manufacturers. Coatings are critical to UK industry, with 300,000 workers relying on our members' products every day, and the UK is a net exporter of coatings and inks. BCF's members represent 95% of the UK sales of coatings, inks and wallcoverings.

Version 9, June 2016