



## **The Little Green Book**

**Sustainability Beyond Reasonable Doubt:  
The Paper and Paper-Based  
Packaging Industry**



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“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



**It starts here.**





It's time to set  
the record straight



It's time,

to be clear about the truth,

to set the record straight, beyond any reasonable doubt,  
about our industry and its contribution to environmental  
sustainability.





**It's time for a reality check.  
It's time to separate myth from reality.  
It's time to know the facts.**

**Read them.  
Know them.  
Use them.**

## EU Forest Facts

**37.8%** - The amount of EU land area with forest cover

**30%** - Increase of EU forest land over the last 50 years

**6,450km<sup>2</sup>** - Annual increase in EU forest land

(source: UN FAO)

**+ 33%** - New trees compared to harvested trees per year

**400 million m<sup>3</sup>** - Quantity of harvested wood (2005)

**37%** - 150 million m<sup>3</sup> - Quantity used for paper making

(source: European Environment Agency, State and Outlook 2005)

## Buying paper and paper packaging destroys forests

Myth No. 1

That's just not true.

Industries that depend on trees need thriving forests. It's in their own self interest.

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.

It sounds counter intuitive but it's a fact - paper makes trees. The demand for paper drives growth of the forests. That's the beauty of a renewable resource.



## Sustainable Forest Management

### Lifecycle



### Usage



### Usage



## Old trees are the best carbon sinks

# Myth No.2

Think again. Next time you have your friends over for dinner tell them this.

For every tree that is logged in managed forests, three to four trees are replanted. And as young trees grow, they absorb CO<sub>2</sub> from the atmosphere.

Common sense might tell you that the bigger and older the tree, the more carbon it absorbs. But you'd be largely wrong. In fact, young forests are much more efficient at absorbing carbon than old forests. Mature trees absorb carbon more slowly the older they get. In addition, as they get older trees start to naturally decompose, which releases carbon and other greenhouse gases back into the atmosphere.

So to maximize the carbon storage that trees can provide, we need young healthy forests where trees are regularly harvested and re-grown. But the benefit doesn't stop there because, as a wood product, paper also continues to store carbon throughout its lifetime.

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 consumes each year.

## 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

## Making paper and paper packaging requires too much energy

# Myth No.3

Lets set the record straight.

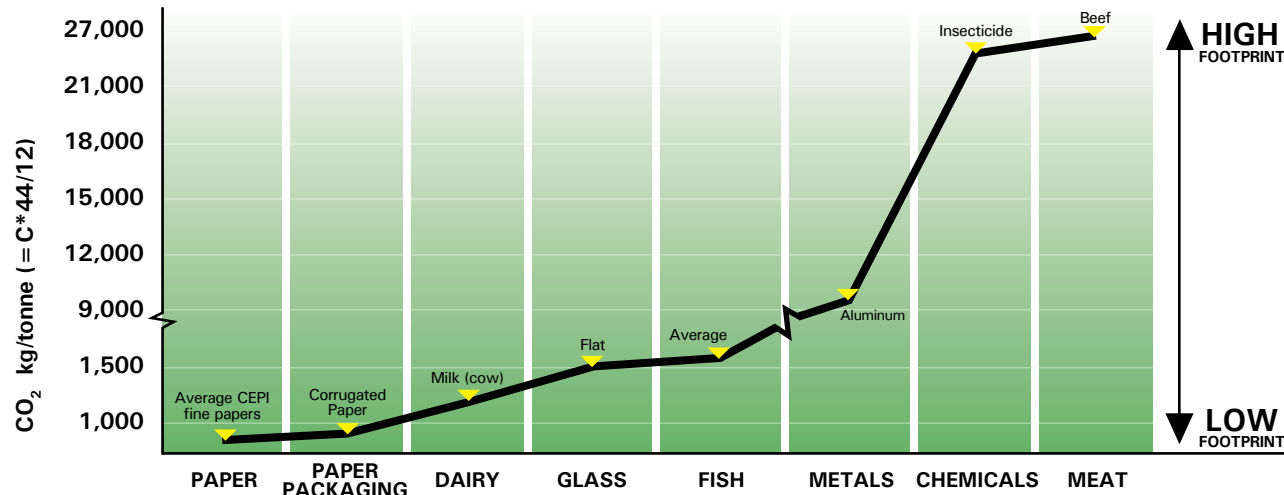
It's true that making paper requires energy, but paper making is a very efficient user and producer of energy. If you look more closely at the evidence you'll discover some surprisingly small statistics about paper and energy...

The forest based sector is the least fossil fuel intensive of any manufacturing sector and the paper industry is the largest single consumer and producer of renewable bio energy in Europe. More than half of the industry's total primary energy consumption is based on biomass.

In fact, as a sector of activity it was the only major industry that was able to reduce its emissions under the EU Emissions Trading System in 2008 vs 2007 (European Commission CO<sub>2</sub> Database).

## Carbon Footprint

(Source: Bilan Carbon database - v6.1, June 2010)



It's time to be more honest with ourselves. Carbon footprints are everywhere. Deciding on our own is a lifestyle choice. But it's better to be fully aware of all the facts in order to make the best choices.

## Paper and paper packaging has a high carbon footprint

Just about everything has a carbon footprint. So let's compare shoe size, shall we?

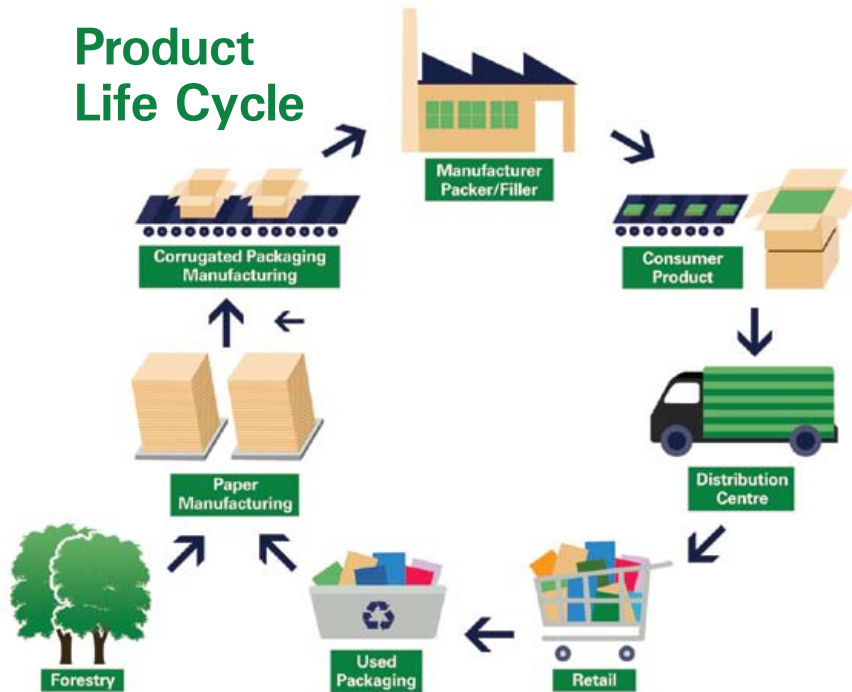
Producing 200kg of paper, the average we each use every year, creates between 130 - 250kg of CO<sub>2</sub> depending on the source of energy. That's comparable to the CO<sub>2</sub> produced by an average family car over a distance of 960km. In fact an article in the Times Online last January highlighted a study by a Harvard University Physicist which revealed that a complex on-line Google search lasting several minutes can generate an estimated 5-10g of CO<sub>2</sub>. Bear in mind that boiling the kettle for a cup of tea generates 15g of CO<sub>2</sub>.

Even your steak dinner tonight has a footprint! Beef and veal have the biggest carbon footprint of all meats - and let's not forget methane, another greenhouse gas. Flatulent farm animals are responsible for 14% of all methane emissions - that's a yeti-sized footprint.

Could you imagine living in a society that told you to "consider the environment before you Google search" or "eating steak damages the environment" - that sounds too much like Big Brother, right! and yet most e-mails in circulation today load you with environmental guilt if you contemplate pressing the print button.

(source: [timesonline.co.uk/tol/news/tech\\_and\\_web/article5489134.ece](http://timesonline.co.uk/tol/news/tech_and_web/article5489134.ece))

## Product Life Cycle



“**Virgin fiber-based carton board is the most sustainable, most environmentally sound packaging application...**”

PricewaterhouseCoopers  
CEO's Perspectives 2010

## Paper-based packaging is an unnecessary waste!

Packaging isn't everything, but it ranks right up there with oxygen.

The fact is that paper-based packages and containers are part of our everyday lives, so it can be easy to forget what makes them unique.

So let us refresh your memory for you.

Unlike other packaging options, paper-based packages are made from trees, a completely renewable source. Practically speaking, because paper-based packaging is 100% recyclable and about 80% of corrugated packaging is collected and recycled, it is beyond any reasonable doubt the most sustainable and responsible choice for business and consumers alike.

Or, as we like to say in the industry, paper-based packaging leads to waste prevention.

So Use after Use after Use and then repeat...





## The Myth

“Even low cost returnable plastic packaging is much more sustainable than one-way cardboard...”

Schoeller Arca Systems Press Release, 24 September 2007

## Reuse is better than recycling

# Myth No.6

How on earth did we arrive at this point?

The European Union's policy emphasis in the environmental field is mainly focused on climate change at the moment. Yet waste management continues to be a priority.

However, in the 1980s and 1990s, environmental NGOs convinced politicians at EU and national level that re-use of a product is almost always better than recycling. In some areas our competitors in the plastics packaging arena have turned this to good effect. They argue successfully in the marketplace that their re-usable crates are more in line with EU policy goals than corrugated trays. Their sales have expanded.

Yet empty plastic crates are returned for refilling by road transport, often over very long distances, generating needless CO<sub>2</sub> emissions. They then require washing with hot water and chemicals to sterilize them, generating yet more CO<sub>2</sub>.

The current EU focus on climate change policy is a window of opportunity to redress the imbalance by promoting more recyclable corrugated trays over plastic crates.



## The industry is doing nothing about illegal logging!

# Myth No. 7

That's utter nonsense and completely wrong.

The European paper and paper-based packaging industry already sources fibre responsibly. The industry firmly condemns illegal logging and has implemented a Code of Conduct on legal logging. The industry also supports all credible certification systems and the percentage of certified raw material used by the industry is 55%.

Half of the EU's forests are already certified and 86% of forests owned by paper companies are certified\*; the industry's commitment to responsible sourcing is clear and beyond any reasonable doubt.

\*(Source: CEPI - sustainability of the paper industry)



# Surprised?

**Let's stop keeping it a best-kept secret.**

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

CEO Perspectives 2008 PricewaterhouseCoopers

It's time to respond to the mass of misleading information about our industry.

Now is the time for clarity. A time to overcome the conventional wisdom and dogma about our sector.

Everyone has the right to know.

But changing public perception takes time so we need to speak with a common voice.





# That time is NOW!

**Go** tell your customers.

**Go** tell your colleagues.

**Go** tell your mother-in-law.

Don't wait for an invitation. Start the **conversation** today...

## 10 Top Facts For Your Next Cocktail Party

Paper production is not a major cause of deforestation, but actually saves forests

For every tree logged in managed forests, 3-4 are replanted

Forest certification promotes wood from managed forests

The annual increase of forest cover in Europe is equivalent to more than 1.5million football pitches

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

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

Paper fibres can be recycled up to six times

Paper is truly sustainable, with waste fully recoverable ready for recycling into new paper

80% of corrugated packaging is collected and recycled

In 2008, the global spam e-mail footprint was equivalent to 3 million passenger cars on the road and required 33 billion kilowatt hours of electricity generation .



Are you interested in knowing more?

Why not read

The Little Book of Commonsense as well,  
It's all about paper, the real sustainable choice.

Order your copy today at  
[www.internationalpaper.com/emea](http://www.internationalpaper.com/emea)



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