



The Environmental Post



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Saillat Forest Trail: a walk of discovery

Approximately 93% of the water we use On 16 June an environmental idea came to fruition at the International Paper mill in Saillat, France. That day saw the inauguration of the Saillat Forest Trail. It is the result of a year of development by Saillat Mil, IP EMEA commercial team and Comptoir des Bois de Brive, the wood-sourcing subsidiary of Saillat Mill.

Since the launch many visitors have already walked the trail, including groups of customers from France, Benelux and Poland. "Feedback from customers so far has been very positive," says Pascal Pequin, Area Manager for Benelux and France, Uncoated Woodfree Papers. "The trail helps people gain a better understanding of forests and forest management as they discover the three different roles of forests – ecological, economic and social." The pathway has

seven different stops, or stations, each illustrating a different aspect of the forest. Emphasising International Paper's commitment to sustainable development, the trail highlights the company's support for local production.

Common & uncommon species

Recently, an arboretum has been added on rehabilitated, non-forest land adjacent to the trail. In total 1,296 trees of 36 different species were planted. Among them are common varieties, such as Sessile Oak, Silver Birch, Sycamore and Wild Cherry. There are less common species too: Eucalyptus, American Red Gum, Ginkgo Biloba and Californian Redwood.

The arboretum is part of a European project to study the impact of climate change on forests. Scientific monitoring



is being conducted by the Institut National de Recherche Agronomique, and the Centre Régional de la Propriété Forestière. The arboretum follows protocols

laid down by the REINFFORCE initiative, which aims to pool research from sites within latitudes 37° to 58° north.

The new European Timber Regulation

A positive step towards more transparent sourcing

In March 2013 the European Timber Regulation Nr. 995/2010 came into effect. Its aim is to reduce and eventually eliminate the trade in illegally logged timber on the EU market. International Paper welcomes the new rule.

Known as the EUTR, the regulation obliges companies to ensure that timber has been harvested in compliance with the national legislation at the place of harvest. Avoiding unacceptable wood fibre sources, in particular wood fibre harvested or acquired illegally, has always been International Paper policy. So implementing the new rule has not presented any difficulties for our supply chain, and there was no impact on the existing traceability systems at the mills.

International Paper has internal security systems, as well as traceability systems certified by third parties (PEFC™ and FSC® chain of custody). These all help to minimise the risk of illegally logged fibre entering our supply chain. Information about country of origin has always been documented by our wood procurement department. And

because our mills are integrated we have direct access to forest owners. With all our wood procured locally, we know our suppliers very well.

Effect on importers

The EUTR is unlikely to differentiate European producers from each other, as there is very little illegal logging in Europe. However, the regulation could affect importers, making it more difficult for paper producers (especially in Asia) to prove all their paper is produced from legally harvested wood. The World Bank has published estimates of countries with the most illegal logging. They include Indonesia (up to 80% of logging is illegal), Brazil (about 80%), Russia (up to 30%) and China (up to 50%). In the US and Europe there is almost no illegal logging (0% and 3% respectively).

International Paper imports products from its production facilities in Brazil, the US and Russia. Each mill maintains a database of all wood deliveries. Documentation covers harvest quantities, species, locations and permits, as well as future harvesting sites. The

mills also have mapping data that locate zones within the wood supply basin where harvesting is prohibited, for example protected areas and forests of high conservation value.

All our wood procurement units and production facilities in France, Poland, Russia and Brazil are certified to the ISO 14001 standard, as well as to the FSC® chain-of-custody standard and the FSC® Controlled Wood standard, and where applicable the PEFC™ chain-of-custody standard. These certifications are the best guarantees that the wood has been harvested legally. Especially for imported products, customers should require that pulp and paper manufacturing sites have a third-party-certified chain of custody in place (PEFC™ and/or FSC®), as well as an environmental management system such as ISO 14001.

The Lacey Act

Although Europe leads the globe in many environmental areas, the US is the pioneer in this area. The story goes back to 1900 with the Lacey Act, a law designed to control wildlife traf-

ficking. The law was amended in 2008 to include wood. The US thus became the first country in the world to ban imports of illegal wood and related products. International Paper has fully supported the Lacey Act and opposes any legislation that would weaken it.

International Paper views such regulations as opportunities to be even more transparent with customers, and demonstrate the wood it uses is harvested locally. In addition to our participation in the Paper Profile initiative (a voluntary environmental product declaration scheme) and our annual sustainability report, we now also give customers detailed information about the origin of wood, the procurement distance and the species used.

The methodologies required by the EUTR are already part of International Paper's global wood procurement policy. The policy covers our facilities and forest management operations globally. Regionally-relevant fibre procurement policies can also be put in place but they are all based on and must comply with the global policy.



Resizing our water footprint

\$26 million delignification project

In 2010 International Paper voluntarily established a list of 2020 Sustainability Goals covering a dozen different areas. We are pleased to report that since then considerable progress has been made towards achieving – and even surpassing these goals. This issue of Environmental Post will show how International Paper is positioning its Saillat Mill for future in terms of water usage.

Water is a primary input into our manufacturing process. In fact, we could not make our products without it. So, it's no surprise that International Paper is working hard to use less water – and to clean up the water we put back into the environment.

Approximately 93% of the water we use goes back to the aquatic environment after treatment. Much of the remaining 7% is returned to the environment via evaporation. While carbon emissions have no frontiers, water is inherently a local resource. So the impact of a water footprint needs to be assessed at a local level. This can be done using water stress projection maps. They take into account such parameters as climate change, population needs and economic developments.

Step by step

Using this approach, in 2013 International Paper analysed its water risk at each facility using a risk-mapping tool

devised by the World Resources Institute, a non-profit organisation focused on sustainability. Other factors in the analysis included perceived community and regional risk, manufacturing risk and customer sensitivity. This analysis resulted in a composite water footprint score for each mill which has allowed us to identify projects to improve their water quality.

Having completed the analysis and the ranking, we are on track to develop site-specific plans by 2015. This is a necessary step in the longer-term objective to reduce water pollution and consumption as part of our 2020 Sustainability Goals (see page 2).

Case study: delignification project at Saillat Mill

An integrated facility manufacturing both pulp and paper, the International Paper mill in Saillat, France, already has a responsible environmental footprint. For example, a large portion of the mill's energy is generated through biomass using wood from local sources (on average 130km distant). Air emissions, including greenhouse gases, have progressively been reduced.

Now an investment of \$26 million has been allocated to build an oxygen delignification stage in the fibre line. This additional process will remove lignin from the wood using oxygen and oxidised white liquor. It will facilitate the

subsequent bleaching stage to produce pulp with high brightness while reducing chemical consumption.

This will result in lower water emissions, in particular for organic compounds and absorbable organic halogens. In total, the emissions to water will be cut by about 30%, with a corresponding improvement in water quality. The oxygen delignification stage

should be completed in April 2015. We encourage all our stakeholders to periodically check on our progress towards achieving the 2020 Sustainability Goals at <http://www.internationalpaper.com/apps/sustainabilityreport2013/homepage.html>.

Tell us what you want to read about in the next edition of Environmental Post?

Each response sent to EnvironmentalPost@ipaper.com will be rewarded and will participate in the draw of Mini iPad.

Tightening the Supply Chain

Bringing logistics performance up to speed

At International Paper we are improving performance across our entire operation, from forest to end-user. A critical link is our supply chain and the logistics that support it. We are proud of our steady progress in this area. Here are a few concrete examples.

Bigger loads means fewer trucks

Since 2010 truck load weights have increased overall. It translates to carrying an average of 1,210 kg more paper in each load. To look at it another way, roughly the same volume is being handled but with 2,000 fewer trucks per year. If they were all put in a line it would create 35 km of traffic.

Fewer trucks mean fewer emissions: a cut of over 1,500 tonnes of CO₂ annually. (This does not include other measures our carriers are taking, such as using more environmentally-friendly trucks, reducing empty mileage, im-

proving fuel consumption, and optimising routes.)

These larger loads have been achieved through continual monitoring by the Centre for Transportation Excellence (our internal transportation department) and close cooperation with our customers. We look for every opportunity to load trucks more efficiently.

New tonnage regulation

From January 2013 trucks in France have been permitted to weigh up to 44 tonnes when loaded. Consequently we have been able to increase loads from our Saillat Mill to destinations within France from 24 to 28 tonnes. Today more than 20% of all loads carry over 25 tonnes. (For Celimo, the Saillat pulp division, the figure reaches 70%.)

Saillat loading efficiency

June 2013 saw the introduction of time slots at Saillat Mill. This has meant a drastic reduction in transporter waiting time. Loaded promptly, trucks

leave the mill on time and thus deliver to our customers on time, making International Paper an even better supplier. Another improvement has been the One Warehouse initiative. It has meant fewer outside warehouse locations, which lead to fewer stops and quicker truck rotation time, as well as lower fuel consumption. As a comparison, in early January 2013 24% of all loads had more than two collection points. Today it is only 2% – and falling.

Also at Saillat, export orders are sent directly in containers. Since September 2013 there has been no transshipment of cargo via departure-port warehouses. The result? Less handling, less energy, reduced waste and no cargo damage.

Direct delivery for imports from Brazil

A few years ago container imports from International Paper Brazil to

the United Kingdom had to be first stored in a Liverpool warehouse, then reloaded onto a truck for delivery to the customer. Since then the system has changed. Today containers are delivered directly to customers. This has allowed transportation distances to be optimised, and has reduced handling and damage, increased safety and cut waste and CO₂ emissions.

In the last year the number of direct delivery customers in the UK has expanded. And the system has been introduced into Ireland, Spain and Portugal.

“International Paper’ supply chain team is looking forward to working further with customers to continue optimising our joint supply chains and reduce our environmental footprint” says Sandrine Bronner, Director of Supply Chain, European Papers.



New Lightweight Board: Alaska Plus

Good news for the environment

At the start of June International Paper launched a new lightweight board onto the European market: Alaska Plus. What makes it so special? To find out, we talked to Michael Krüger, Commercial Director Coated Paperboard and Recycled Specialties.

“Alaska Plus represents a step-change in lightweighting, with basis weights significantly lower across the range compared to other standard GC2 products,” Michael explains.

The development of this radically lighter-weight GC2 product responds directly to growing customer demand for packaging solutions that are both economically attractive and environmentally sustainable. “Using the latest technology in board making, we have been able to lower the basis weights of this product, while keeping all other Alaska technical parameters stable,” says Michael.

Fewer resources, lower transport weights, less waste

The production of Alaska Plus consumes fewer resources, offers lower transport weights and produces less waste. Thanks to its reduced weight, Alaska Plus decreases the environmental impact and cost at all stages of the product’s life cycle. It’s good news not only for the environment but also for packaging converters and brand owners.

“They can switch to Alaska Plus without any performance-related adjustments, while enjoying the commercial and environmental benefits of a modern, lightweight, folding boxboard,” Michael points out. This transition is facilitated by the fact that, apart from the weight reduction, there are no changes to the paper’s technical specifications.

Alaska Plus is designed for pharmaceutical, healthcare and beauty care packaging, as well as for chocolate

FOR EXAMPLE

Replacing Alaska 300g/m² with Alaska Plus 280g/m² results in a weight saving of 7%

ALASKA

1,000,000 m²
10 M boxes
300 tons

The same number of boxes
7% lighter

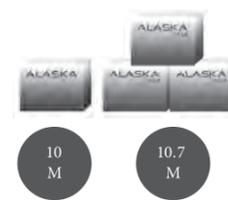


ALASKA PLUS

1,000,000 m²
10 M boxes
280 tons

... OR

The same material weight
7% more boxes



ALASKA PLUS

1,070,000 m²
10.7 M boxes
300 tons

and all kinds of dry food applications. The new paper is available through International Paper’s flexible sheeting service, Kwidzyn X-Press. “This means customers can order small volumes in bespoke sizes with a guaranteed turn-around time of just four days plus transport,” says Michael.

Summing up this new product launch, Michael remarks, “The performance of Alaska Plus in printing, converting and packing is as excellent and effortless as our customers would expect from a product with ‘Alaska’ in the brand name.”

Looking beyond 2020

EU Climate and Energy Policy Framework 2030

The European Union is planning further steps to reduce carbon emissions in order to help mitigate global climate change. To prepare for these policies, the pulp and paper industry is keen to know what lies ahead.

Back in 2011 the European Commission adopted what it called the Energy Roadmap 2050: a commitment to cut greenhouse gas (GHG) emissions 80-95% below 1990 levels by 2050. Based on this roadmap, in January of this year the Commission presented its proposed framework for climate and energy policy covering the decade 2020 to 2030.

Aiming for targets

The framework includes two clear binding targets. One is an overall 40% reduction in GHG emissions compared to 1990. Included in this will be

binding sub-targets for Member States. Another is to grow renewable energy sources (RES) to 27% of overall EU energy production. It is binding for the EU but not for individual Member States. The Commission thinks that the GHG reduction by itself should encourage the RES target.

As yet, the 2030 framework sets no targets on energy efficiency. However, the Commission says its proposed GHG cuts would require energy savings of approximately 25% by 2030. Targets will therefore be reviewed this summer.

The devil is in the details

As the old saying points out, implementing the 2030 goals will require careful planning. Member States have to submit detailed national strategies for achieving their domestic GHG objectives. The framework proposes flexibil-

ity in defining a low-carbon transition appropriate to national circumstances, preferred energy mix, and costs. But the plans must cover RES, energy efficiency, energy security and R&D, as well as other choices, such as nuclear energy, shale gas, and carbon capture and storage (CSS).

Beyond Europe

Looking globally, the 2030 framework does not insist on “conditionality”. The Commission believes it is in the EU’s own interest to reduce GHG emissions and promote RES and energy efficiency. If a more ambitious target emerges from international negotiations, the additional effort could be balanced by allowing access to international credits.

That said however, the 2030 framework has divided EU Member States. It is supported by Belgium, Denmark, Es-

tonia, Finland, France, Germany, Italy, the Netherlands, Portugal, Slovenia, Spain, Sweden and the UK. Ministers from these countries urged the European Council to back the proposed targets, claiming that investment in domestic energy sources promotes greater energy security. Member States reliant on coal (Poland, Slovakia, Czech Republic and Hungary) insist on postponing any decision.

September will see a summit organised by the UN Secretary General on an internationally binding climate-change agreement, to which the EU 2030 package is linked. Energy ministers, possibly with environment ministers, will discuss the framework further at an informal meeting on 6 October 2014. The European Council wants to agree on the 2030 framework and present its conclusions by the end of October.

Towards a zero-waste Europe

The circular economy package

Did you know that 2014 was designated the European Year of Waste? It may not be a very catchy slogan. But it highlights serious legislative proposals that will affect all European citizens. And in very specific ways, the pulp and paper industry.

In early July the European Commission released a series of measures bundled together under the heading “Towards

a Circular Economy”. It contains ambitious waste recycling targets that the Commission says will create 580,000 new jobs, make Europe more competitive and reduce demand for costly scarce resources.

The legislative proposals refer mainly to the Waste Framework Directive, the Landfill Directive and the Packaging and Packaging Waste Directive.

In addition to fixing new targets, waste legislation will be simplified and co-operation between the Commission and Member States will be boosted to ensure better implementation.

Closing the loop

What is a circular economy? Forget extracting raw materials, using them once

and throwing them away. In a circular economy re-use, repair and recycling become the norm, with waste a thing of the past. The new bundle of measures explains how innovation in recycling markets, new business models, eco-design and industrial co-operation can move Europe towards a zero-waste economy and society.



Among other things, the proposals ask Europeans to ban the burying of recyclable waste in landfills as of 2025. Landfilling will be phased out for plastics, paper, metals, glass, bio-waste and other recyclable materials. In addition, 70% of municipal waste should be recycled by 2030.

The plans also mandate the recycling of 80% of packaging waste by 2030. Mate-

rial-specific targets are set to gradually increase after 2020 to reach 90% for paper by 2025, and 60% for plastics, 80% for wood and 90% for ferrous metal, aluminium and glass by the end of 2030.

Early warning system

Other measures are intended to facilitate compliance with these stricter targets. For example, an early warning

system will be introduced to anticipate and avoid possible compliance difficulties. Minimum operating conditions for extended producer responsibility schemes will be laid down.

Expect to see simplified reporting obligations and a lighter burden on SMEs. Other improvements include harmonised target calculations, more reliable statistics, better-aligned definitions and

the removal of obsolete legal requirements.

If the route towards a circular economy follows a straight line then the legislative proposals will now pass to the Council and the European Parliament. The policy framework for promoting this recycling-based economy will be further developed over the coming years.

Two Sides | Telling the true story about paper sustainability

There is a lot of misinformation in the media about paper. In response, the Two Sides initiative was set up to give business and consumers the sustainability facts on print and paper. To learn more about its activities, Gerald Demets, Sales and Marketing Director at International Paper, spoke with Martyn Eustace, Director of Two Sides UK.

What is Two Sides and what are its main goals?

Two Sides was created in 2008 by members of the Graphic Communications Supply Chain. Our members cover a wide range of sectors: forestry, pulp, paper, inks and chemicals, prepress, press, finishing, publishing, printing, envelopes and postal operators. We work to dispel common environmental misconceptions and explain to users why print and paper is such an attractive, practical and sustainable communications medium.

The sectors you mention are global. What is your geographical scope?

Two Sides is active in Europe, the US, Australia and South Africa. In Latin America we're present in Brazil and Columbia.

You mentioned misconceptions. Many people think that making paper is what destroys forests.

In fact, the single biggest direct cause of tropical deforestation is conversion to cropland and pasture, mainly for subsistence. As you know, Gerald, paper production supports sustainable forest management. Take Europe, where 98% of forests are covered by a forest management plan or an equivalent. Not coincidentally, European forests are growing at a rate of 1.5 million football pitches every year.

Another forest myth is that planted forests are somehow bad for the environment. The European Environment Agency has stated that forestry practice in Europe is developing in a way that can be considered good for biodiversity. Moreover, well-managed plantations are essential for meeting the growing demand for wood and pulp products. The WWF Living Forest Report projects that around 250 million hectares of new, planted forests might be needed by 2050 to support population and GDP growth.

What other environmental misconceptions do you encounter?

There's one that paper is bad for the environment. In fact, paper is one of the few truly sustainable products. It's based on wood, a natural and renewable material. And as young trees grow they absorb CO₂ from the atmosphere. Also, it is incorrect to say that making paper uses a lot of non-renewable energy and has a large carbon footprint. Most energy used is renewable, and carbon intensity is surprisingly low.

Some people think that we should only use only recycled paper. But of course, paper made from sustainable forests is needed to start the paper cycle. You might hear that paper is a wasteful product. The fact is that paper is one of the most recycled products in the world. In 2012 European recycling rates for paper reached 72%.

There's also a myth that electronic communication is more environmentally friendly than print and paper. Not necessarily. If you're reading either a web-based or a printed newspaper 30 minutes a day, the environmental impact is similar. The amount of electronic products discarded globally has skyrocketed, with 20-50 million tonnes generated every year.

This is certainly a lot of misunderstanding. What is Two Sides doing to counteract it?

We're engaged in three key media campaigns. One we call Print Power. It's targeted at media and marketing professionals across Europe and promotes the use and effectiveness of print media. We publish the Print Power Magazine twice a year in nine different languages: 70,000 copies are distributed in 11 European countries. We also send out up to 50,000 Print Power Newsletters globally each month. This is all supported by the Print Power website www.printpower.eu with more than 5,000 visitors a month.

Then there's the Two Sides campaign. It informs paper users everywhere that print and paper is an attractive and sustainable means of communication. The campaign is active in 13 European countries and supported by a website www.twosides.info full of facts, case studies and resources. Finally, I'll mention the "No Wonder You Love Paper" campaign. It's aimed at consumers, informing them how European forest are growing in size and, of the excellent recovery and recycling record of waste paper. Many national newspapers and magazines now carry these adverts.

Does Two Sides ever address companies directly about misinformation?

We do have a process to engage companies making incorrect or greenwash claims on paper's impact on the environment. We send a letter with evidence and facts. If they refuse to change their messages we may consider issuing a press release detailing these.

That's quite a list of activities. Have you seen any results yet?

We've had a very successful outcome with businesses in the UK who were making inaccurate claims. Of the companies we engaged, 83% of banks, 64% of utilities and 100% of telecoms changed their messages. Our experience is that when presented with the facts most companies change their communications.

In addition, our advertising has succeeded in changing consumer attitudes. The market research firm IPSOS conducted tests of consumers after exposure to the No Wonder You Love Paper adverts. The study looked at a range of perceptions about print and paper sustainability, including renewability, the effects on forests, recycling and comparison with electronic media. In all of these areas consumer attitudes to paper improved.

Following these successes, what is next for Two Sides?

Our activity in UK and other European countries is ongoing. There's still a lot of misinformation circulating that needs to be countered by the facts. Facts that show how sustainable print and paper really is.

About International Paper

International Paper (NYSE: IP) is a global leader in packaging and paper with manufacturing operations in North America, Europe, Latin America, Russia, Asia and North Africa. Its businesses include industrial and consumer packaging and uncoated papers. Headquartered in Memphis, Tenn., the company employs approximately 65,000 people and is strategically located in more than 24 countries serving customers worldwide. International Paper net sales for 2013 were \$29 billion. For more information about International Paper, its products and stewardship efforts, visit internationalpaper.com.

In Europe, Middle East, Africa & Russia (EMEA), International Paper focuses on the production and marketing of office papers and paper-based packaging. The company is a leading supplier of high-quality cutsized papers, coated and uncoated paperboard and corrugated containers for a wide range of applications. International Paper in EMEA had net sales of approximately \$3.2 billion in 2013 and employs approximately 9,000 people.