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UPM RAFLATAC CUSTOMER MAGAZINE

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-LABELED**
cans now recyclable

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**SUSTAINABLE
BEVERAGE LABEL**

20 **Attractive shrink
sleeve labels**



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UPM leads the integration of bio and forest industries into a sustainable future. Biofore stands for innovation, responsibility and efficiency. www.upm.com

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Love the label

In addition to organic growth and synergistic acquisitions, product portfolio development and the industry-leading services are in the essence of UPM Raflatac's growth strategy. Our success results from exploring new ideas and closely working together with our customers and business partners. As our newly appointed Executive Vice President **Antti Jääskeläinen** rightly says, the way to be successful is by "being adaptive and ready to develop our offering to meet the customers' needs."

A great example of this is how we teamed up with the printing house and the Finnish brewery to launch – for the first time in Europe – a beverage in labeled cans that are integrated into a return system for recycling. Cans are labeled with our ultra-thin and recycling-compatible VANISH™ film material. Collaboration is the power to create something new and sustainable, even something previously thought impossible.

Sustainability is more and more important in the labeling industry of today. This is also demonstrated by the increasing number of sustainability-related customer inquiries that we receive annually. In 2015, we replied to over 2,000 customer enquiries just on sustainability topics. Of course, brand owners are also demanding more design unique solutions from their packaging - visuals that make heads turn and encourage customers not just to identify but to love the label. It is the potential to create something unique and visually stunning that drives UPM Raflatac to work with businesses that are investing in new printing and decoration technologies to meet the end-users' needs.

We have shown that product development, sustainability, and innovative design solutions are a must for the growth of our business and for the growth of the whole label industry. This is achievable through the collaboration and willingness of all the parties involved in finding solutions that benefit each one of us.

Ulla-Riitta Unkuri

Vice President, Stakeholder Relations

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global packaging trends

2016 will be the tipping point for **digital package printing** – which already accounts for **10% globally** – as brands and package converters begin to capitalize on its economic and speed-to-market advantages for mainstream package decoration.

Brands are tapping into the nearly unparalleled decoration and marketing opportunities of **flexible packaging**. In 2016, the truly innovative brands will be looking to the next generation of rigid/flexible hybrids that offer functional and environmental benefits alongside great shelf presence.

Consumers are demanding more information about what they are buying – 76% of UK consumers are concerned about the use of artificial preservatives. But they are also seeking less on-pack clutter. Clear and concise information must be communicated with total transparency. The concepts of **clean labeling and clear on-pack communication** are set to converge.

Package recycling is well below its potential, but what is beginning to resonate are two key initiatives: focusing on **alternative package material sources**, and catering to the 63% of US consumers who've stated that a key purchasing driver is **reusable and repurposable packaging**. Brands cannot afford to ignore this "ecologically friendly" purchasing driver as they develop their brand positioning and marketing strategies.

Brand owners must offer a **greater range of pack sizes – larger and smaller**. In 2016, following such major downsizing strategies as those by Kellogg in 2015, if brand owners are to overcome the growing lack of consumer brand loyalty, brand owners must create and deliver packaging that consumers see as right-sized for themselves, their families, and shifting use occasions.

The mobile environment will become the new front line in the battle to win consumers' hearts, minds, and wallets. Brand owners are tapping near-field communication (NFC) and bluetooth low-energy (BLE) as primary engagement technologies to deliver on the promise that so many first-generation mobile engagements like QR or text codes either didn't or couldn't.



LABEL ACADEMY OFFERS A BENCHMARK QUALIFICATION

Label Academy is a global training and certification program for the label and package printing industry. It consists of a series of self-study modules, combining free access to relevant articles and videos with paid text books (both printed and electronic). It is expected that a Label Academy qualification will become a standard in the industry – for printers/converters, suppliers, brand owners and designers – and assist in providing a benchmark.

Read more at www.label-academy.com

31%
of converters
will buy
a digital press
in the next
six months.

From FINAT Radar 2016 report that tracks European converter, brand owner and material supplier trends.

finat.com

THERMAL PRINT INDUSTRY TO REACH \$39 BILLION IN 2021

The growth of the global thermal printing industry is being driven by trends and business opportunities among organizations using thermal printing equipment. Areas of significance are:

- Customer service, where older impact technologies are being replaced for improved print quality, double-sided printing potential and mobile point-of-sale applications.
- Productivity improvements principally through barcodes, smart cards and smart labels.
- Anti-counterfeiting, like adding security features to direct thermal media, such as watermarks that are not reproduced when photocopied, and security printing with specialized thermal transfer ribbons.
- Product safety for the reliable tracing of foods, beverages and safety equipment in the event of recalls.
- Government regulations, like FDA requirements for data validation, timestamps, maintenance of records and electronic signature capture for industries including pharmaceutical and healthcare, food and beverage.

smitherspira.com

TEXT CARINA CHELA
PHOTOS SAMI HELENIUS,
ANTTI JÄÄSKELÄINEN

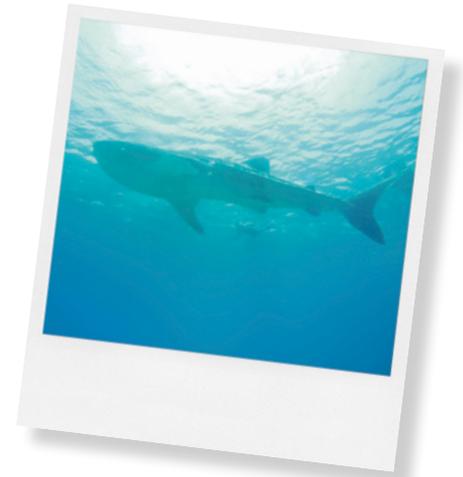


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“Being adaptive,
ready to develop
our offering and meet
customers’ needs in
the long-term is the
way to survive and
be successful.”

—

Introducing **Antti Jääskeläinen**, the new Executive Vice President of UPM Raflatac



Being present and looking into the future

Last year, UPM Raflatac celebrated its 40th anniversary. Newly appointed Executive Vice President of UPM Raflatac **Antti Jääskeläinen** has a simple but demanding vision for the coming decades to ensure the company's future success.

"We cannot grow without customers, so it's all about taking care of the customers and offering great service – actually the best service. This – and product development – will ensure success for the next 40 years to come."

Antti Jääskeläinen originally joined UPM Raflatac as head of EMEA business in 2014. Previously, he worked several years in the consumer goods industry running the supply chain and global distribution operations of a sporting goods company Amer Sports. Having lived and worked in the UK, Sweden, Italy, France and Canada, he brings a wealth of international expertise and cultural competence to UPM Raflatac.

Jääskeläinen is very confident about the current state of the labeling industry. "In the grand scheme of things the value chain of the labeling industry is a healthy one. It is growing and there are underlying positive new trends, both in mature markets and developing markets. The industry as a whole has good prospects," he says.

Pressure sensitive materials are now used in a wide variety of consumer products. "Pressure sensitive has already overtaken the wet glue industry, and it has good prospects as a technology in the label market. Shelf-appeal really counts in product labeling, and this creates demand for great-looking labels. Consumption is also driven by legal requirements. In the European Union, for example, a recent food labeling directive increases the minimum information required on products and stipulates a minimum size for the typeface, which basically makes the label bigger," explains Jääskeläinen.

In February 2019, new EU legislation for the pharmaceutical industry will also require all prescription drug packages in Europe to be tamper-evident. Self-adhesive tamper-evident labels will be one solution to this directive. E-commerce is also a major trend that will drive the use of self-adhesive labels.

According to Jääskeläinen, UPM Raflatac's strengths can be seen in its global footprint, its efficient asset platform and the scale of its research and development and technical expertise. "We are known to have the best service in the market and we want to continue that way. It might sound like a marketing punchline but it's also true. Our customers often tell us we are the nice guys!"

Actively responding to new trends is also a requisite to further improve the company's service capability in different markets. "Being adaptive, ready to develop our offering and meet customers' needs in the long-term is the way to survive and be successful," says Jääskeläinen. When a good idea or useful product development emerges in one corner of the planet, he wants to make use of that knowhow globally for the benefit of all of UPM Raflatac's customers in different markets.

He believes it's also important to never underestimate the appearance of a product. "Wine labels are a good example. Many people choose a bottle of wine because of its label, but they don't have a clue what the wine is about. Most of us won't admit this but it's true."

Jääskeläinen is married with three children and is a trained rescue diver. In his spare time, he goes diving with his 15-year-old son whenever the opportunity arises. These are clearly special times. He proudly shows an impressive picture of a whale shark he took off the coast of the Maldives. "It was the best nature experience I've ever had," he says. The wonder and sheer beauty of the undersea world holds great meaning for him. It is a sensitivity that he also brings to the colorful world of labeling.

TEXT JUSSI ROKKA
PHOTOS SAIMAAN JUOMATEHDAS



UPM Raflatac's ultra-thin VANISH™ PET film now enables three functionalities previously considered impossible: self-adhesive labeling on beverage cans, recyclability with aluminum cans, and the opportunity for beverage brands to market small batches cost effectively.

The impossible made possible

Beverage cans labeled and recyclable

Finland is a frontrunner in beverage container recycling – and now the first country in Europe where it's possible to recycle labeled cans. The Saimaan Juomatehdas brewery has launched a packaging innovation developed in cooperation with UPM Raflatac and the Auraprint printing house, which allows labeled cans to be recycled in exactly the same way as their direct-printed counterparts.



The Saimaan Juomatehdas brewery is the first company in Europe to launch a beverage in labeled cans integrated into a return system for recycling. The innovation was developed in cooperation with UPM Raflatac and the Auraprint printing house. The package is labeled with VANISH™, the new ultra-thin label material from UPM Raflatac.



Jussi Laukkanen, CEO, Saimaan Juomatehdas

The recycling system for beverage containers in Finland is renowned as the most effective worldwide. Returnable, refundable deposit cans are the most recycled container category, with a recycling rate as high as 95%. Labeled cans, however, have presented a challenge for this deposit-based system. They haven't been eligible for recycling because the proportion of plastic in the label has been too high compared to the total weight of the can.

Labeled cans are a necessity for canning smaller batches of beer because ready-printed cans aren't manufactured in volumes below 100,000. This presented a problem for the Saimaan Juomatehdas brewery and other players in the industry – one that no one had been able to solve in a way that was economically viable yet environmentally conscious.

Green light for product launch

Saimaan Juomatehdas teamed up with UPM Raflatac and the Auraprint printing house, and together they found the solution. The cans are labeled using VANISH™, the latest ultra-thin label material from UPM Raflatac.

“Saimaan Juomatehdas is committed to sustainability, so we wanted to come up with a canning solution for our smaller beverage batches that would match our principles. We explored different options and discovered the VANISH label material. Together with UPM Raflatac and Auraprint,

we started looking into the possibility of applying it to recyclable cans – and everything started to fall into place,” says **Jussi Laukkanen**, CEO, Saimaan Juomatehdas.

Before the new packaging was launched, VANISH underwent laboratory testing in Europe. The test results confirmed that it doesn't interfere with the aluminum recycling process.

“The testing and the results proved the feasibility of this packaging innovation, and the project got the green light from the recycling companies. The project has now reached the finishing line, and we're proud to announce that we're the first company in Europe to launch a beverage in labeled cans that are integrated with a return system for recyclables,” Laukkanen states.

Broader ranges at lower prices

For consumers, this packaging will result in a lower average price and a broader range of products. The recyclable packaging will also benefit the environment. Collected can material is practically 100% reusable for making new cans, and the recycling process can be repeated almost indefinitely. Recycling requires just 5% of the energy required to manufacture cans from raw materials.

Cans are also logistically more efficient than bottles.

“We're convinced this packaging innovation will create new opportunities for other players in the industry. We hope it gains popularity and helps the business activity of the entire beverage industry to grow and develop further,” Laukkanen concludes.

UPM Raflatac is similarly excited about the newly discovered application for VANISH in Europe.

“Our end-customers place high value on their product packaging. VANISH is an attractive and exceptionally versatile label material – and an ideal choice for companies like Saimaan Juomatehdas which strive to create high-quality products that are visually impressive,” says **Tuomo Wall**, Director,

Films, UPM Raflatac EMEA. “VANISH also introduces a cost-effective solution for product decoration on smaller batches of beer and other beverages.”

Brand owners in Europe now have a recycling-compatible choice for greatly enhanced product presentation that meets their own as well as UPM Raflatac's commitment to providing sustainable solutions.

**VANISH is
the recycling-
compatible choice
for beverage cans.**

TEXT ANDREW AYRES
PHOTOS STUDIO PARR,
UPM RAFLATAC



Studio Parr

PUSHING THE BOUNDARIES OF PRINT DESIGN



“Without an in-depth knowledge of print tech and label materials, a beautifully creative design will fail to deliver the desired result,” says **Will Parr**, head of UK-based brand creation, identity and packaging design specialist Studio Parr. He is proud of the relationships his company has formed with some of the world’s best print-houses and says it takes good communication at this final stage of a project to bring all the hard work to fruition.

“As a small agency, we can’t rely on an artwork department or ‘in-house’ print specialist. So primarily I need to be a creative designer – without this ability you wouldn’t be able to strive to solve client problems and answer their briefs.”

Studio Parr’s work with a growing number of English sparkling wines indicates a clear need for a greater variety of “wet strength” uncoated papers. The company is also seeing rising demand for wet strength papers in the craft beer sector – PP has the strength that contract bottlers are looking for but, unlike papers, it doesn’t give the right premium cues for this sector.

The most common request in the last year has been finding creative ways to add cost-effective premium detailing.

“I’ve found good results in pushing the boundaries of print technology

Studio Parr created the designs for UPM Raflatac’s latest wine label sample swatch. The designs show each label material’s potential for innovative design and premium branding.



to utilise flat-bed emboss detailing to great effect, whether intricate blind-emboss or micro-detailing on foil,” describes Parr. “Predominantly, an uncoated material will be specified, but the thickness of the material determines how hard we can hit the emboss tool. UPM Raflatac’s Fleur de Coton seems to handle these constraints well.”

When specifying paper materials to printers, he describes UPM Raflatac as his “go-to” choice: “They’re internationally known, with great accessibility and availability. The performance of their products is dependable and consistent – the substrate feel and texture, colour handling and good foil lay-down.”

Studio Parr is also responsible for creating the design for UPM Raflatac’s latest wine label sample swatch “This is our craft.” The brief was to showcase UPM Raflatac’s knowledge, innovation, craftsmanship and passion for producing self-adhesive wine and spirits label materials. Ten striking designs were created to showcase each label material’s potential for innovative design and premium branding.

Will Parr sums up the creative process: “We wanted to create a response that was both inspirational and functional – from the project outset we saw the potential to create something visually stunning and unique, clearly positioning UPM Raflatac as an industry-leading specialist.”

“Without an in-depth knowledge of print tech and label materials, a beautifully creative design will fail to deliver the desired result,” says design specialist Will Parr.

TEXT HOLLY LARSON
PHOTOS UPM RAFLATAC

Pressure sensitive labels are ideal for specialty beverage manufacturers because they accommodate lower minimum quantities and offer more finishing options than traditional cut-and-stack labels.

Living legacy

DWS Printing Associates creates a sustainable beverage label



In 1865, Abraham Lincoln was in office, The Civil War was ending and David Weil was starting up a lithographic company in New York called David Weil's Sons Lithographic Company (DWS). Soon after, Charles Staib became a principal partner, bought out the Weil family and built a business – DWS Printing Associates, which continues to this day.

Building on their heritage, today the Staib family – **Tom Staib**, President; **Andy Staib**, Vice President; and **Kathy Staib**, Senior Director of Sales – have developed a thriving label printing and packaging design business headquartered in Deer Park, New York.

The Staibs aggressively invest in new printing and decoration technologies to meet their clients' needs. DWS uses high-end 10-color flexo and eight-color offset presses it calls “Beauty” and “The Beast” to produce shrink-sleeve, roll-fed, pressure sensitive and cut-and-stack labels.

Beverage labels with staying power

DWS is especially strong in beverages, citing the juice companies Apple & Eve and Purity Organic, the guayusa-tea beverage firm Runa, Health Ade Kombucha and the craft beer pioneer Brooklyn Brewery among its clients on its corporate website. Wet-



strength papers, which provide tenacious water-resistance in refrigerators and ice chests, are popular with the company's beverage clients.

Pressure sensitive labels are ideal for specialty beverage manufacturers because they accommodate lower minimum quantities and offer more finishing options than traditional cut-and-stack labels.

The Staibs decided to create a unique label that could serve as a calling card for building its craft beverage business, and also enhance the company's brand as a sustainability leader. Andy Staib found a 60-pound 100% recycled paper on the market with wet-strength properties that

he thought had potential as a sustainable beverage label, "But the product needed to be thinner to work on high-speed label applicators," he states. He worked with Monadnock Paper Mill (MPM) to bring the weight down to 51 pounds and added it to his portfolio for cut-and-stack, glue-applied applications.

Trademarked Legacy Label®, the eco-friendly label paper is a 100% post-consumer recycled, wet-strength paper made carbon-neutral and Green-E certified. An uncoated paper, the Legacy Label®, has a rich look that is especially appealing to craft beer and beverage companies that want to stand out with premium branding and a



sustainable label on their package.

Mike Martin

A win-win relationship for business partners

Andy Staib wanted to take Legacy Label® one step further by offering a pressure-sensitive version of it, so he contacted **Mike Martin**, Territory Sales Manager, UPM Raflatac.

Along with MPM, the team was able to arrange for UPM Raflatac to gain access to the untreated paper stock and convert it to pressure sensitive label paper. This arrangement enabled UPM Raflatac to run lower volumes of pressure sensitive label stock and still ensure their timely sale. The face paper is paired with UPM Raflatac's RH09 adhesive to stand up to water and moisture.

"Our customers like the look and feel of the Legacy Label® as well as the sustainability benefits. It's a niche product, but it is growing," says Andy.

A beer brand that's an instant classic

Long Trail Brewing Co., based in Bridgewater Corners, Vermont, uses the Legacy Label® on its Long Trail Ale. "Our clients at Long Trail tell us that their customers love the label, and it's a perfect fit for their business model," states Andy.

"Legacy Label® is a differentiator for our company, and that's important. It shows our commitment to doing what's best for the environment and our clients, which is one of the reasons we're staying ahead of the game."

UPM Raflatac globally

We're here to serve you!

We at UPM Raflatac have thousands of people serving you in different parts of the world. Who are we? Find out!

● Factory
● Terminal

USA
"The Americas market is thriving. It's a fun, fast-paced and ultra-competitive market, so we always look for new ways to strengthen our partnerships with customers and help them build their business."



CANADA

"Canada is a vital part of UPM Raflatac's North American business. We're working actively to grow our market share by helping our customers achieve better business results."



Dixon, IL
Fletcher, NC
Mills River, NC

MEXICO

"It's exciting to help companies in the Mexican market build their brands with exceptional label products. We really feel like we're a part of a great growth story here."

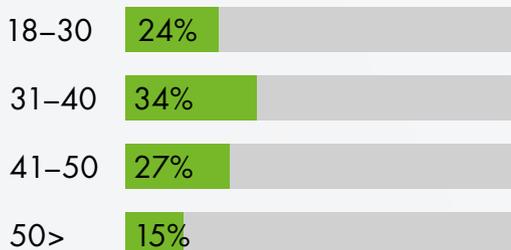


São Paulo, Brazil

GENDER STRUCTURE



AGE STRUCTURE



39
is the average age of our personnel globally

JOB SATISFACTION



SCANDINAVIA

"Iceland, Norway, Sweden and Denmark form a small but effective Scandinavian office. We are happy to bring the Scandinavian Raflatouch to all our customers!"



CHINA

"We've made key investments in China which enable us to serve our customers with new capacity throughout the Asia-Pacific region and even beyond."



Scarborough, UK

Nancy, France

Tampere, Finland

Wroclaw, Poland

Nowa Wies, Poland

Johannesburg, South Africa

Durban, South Africa

Cape Town, South Africa



Changshu, China

Johor, Malaysia

INDIA

"With more than 100 major languages, multiple dialects, different cultures and of course two local label stock terminals, UPM Raflatac serves hundreds of customers across different parts of India and the whole of South Asia."

PERSONNEL BY REGION



TEXT TENFOUR
PHOTOS CIELO E TERRA,
UPM RAFLATAC



Partnerships in sustainability

Working with customers is an integral part of UPM Raflatac's holistic approach to sustainability. Read how we're working together to better understand the full lifecycle of the label products we manufacture.

UPM Raflatac and Cielo e Terra have cooperated to study the environmental impacts of wine bottles. The LCA study shows clear benefits from investments in renewable energy, with a 10% reduction in greenhouse gas emissions and a 24% reduction in water consumption during the lifecycle of a wine bottle.

↓ 10%

reduction in greenhouse gas emissions

↓ 24%

reduction in water consumption during the lifecycle of a wine bottle.

CASE 1:

Cielo e Terra

UPM Raflatac and leading Italian wine producer Cielo e Terra have worked together to assess the environmental impacts of wine bottles throughout their lifecycle, using lifecycle assessment (LCA) methodology.

The LCA study covered all the raw materials used, taking into account the full lifecycle of the wine bottle, labels and packaging elements – from extraction of natural resources to the point of disposal or recycling. The wine production process was not included in the scope of the study.

“Our aim is to better understand the environmental impacts related to our products and, together with our suppliers, find new ways to reduce them. The impacts of our recent investments in renewable energy are clearly visible in the results of the LCA study,” says **Giampietro Povolò**, Finance and Operation Manager, Cielo e Terra.

“When comparing the years before and after the investments, we can identify reductions in greenhouse gas emissions of 10% and water consumption of 24% during the lifecycle of a wine bottle.”

The results of the study indicate that glass production has the most significant

environmental impact in the wine bottle product lifecycle. Energy and fuels used on-site, as well as secondary and tertiary packaging such as boxes, pallets and plastic wrapping, are also significant in a number of lifecycle impact categories.

Corporate social responsibility has long been an important focus for Cielo e Terra, which has made great strides forward in sustainability in a number of areas beyond its investments in renewable energy. Among other things, the company prints a significant proportion of its labels on UPM Raflatac’s FSC™ and PEFC™-certified label materials sourced from sustainably managed forests. Cielo e Terra also participates in UPM Raflatac’s RafCycle® recycling program, which gives a new life to self-adhesive label waste that would otherwise be incinerated or landfilled.

“Our sustainability-related cooperation with Cielo e Terra began with RafCycle few years ago,” says **Stefano Pistoni**, End-Use Manager, Wine and Spirits at UPM Raflatac. “The joint LCA study is a natural continuation of this dialogue, and a unique example of how a label producer and wine bottler can work together on sustainability issues.”



Baumgarten conducted a lifecycle assessment of its label solutions with support from UPM Raflatac. The first study compared the environmental impacts of glassine (landfilled) vs. PET (recycled) release liners for the Brazilian market.

Decreased CO₂ emissions by
↓ 15%

Reduced water consumption by
↓ 33%

Cut the solid waste generated by
↓ 20%

CASE 2:

Baumgarten

Baumgarten has forged ahead of the industry together with UPM Raflatac in conducting a lifecycle assessment of its products. Baumgarten began its efforts around LCA with a foundational study comparing glassine and PET release liners for a product produced using UPM Raflatac label stock. The scope of the study was from the cradle to Baumgarten’s customer gate, and it incorporated the end-of-life scenario for the release liner. UPM Raflatac participated in the study by providing valuable data regarding its own product lifecycle.

When Baumgarten evaluated substituting PET liners (recycled) for glassine liners (landfilled) and applied this to the consumption of 100,000 label sets, they found that PET:

- Decreased CO₂ emissions by 15% – the equivalent of a short passenger flight
- Reduced water consumption by 33% – the equivalent of 3,015 loads of laundry
- Cut the solid waste generated by 20% – the equivalent of the daily waste of 488 Brazilian people.

“Our LCA study was insightful,” says **Gabriela Neves Ferri**, R&D Manager, Baumgarten. “We saw real value from analyzing the Label Life figures from UPM Raflatac, so we can build towards creating a total picture of the environmental impact of our products.”

Baumgarten has already embarked on a second LCA collaboration with UPM Raflatac.

WHY TAKE A LIFECYCLE APPROACH?

LCAs help us understand the full lifecycle of the label products we manufacture – from raw materials to disposal and recycling.





Why do companies partner in sustainability?

Sustainability in the packaging industry is fast becoming the new norm. Driven by megatrends like globalization, digitalization, resource scarcity and climate change – and consequently by growing consumer awareness and regulatory development – the industry faces ever-increasing interest in sustainability. At UPM Raflatac alone we receive thousands of sustainability-related customer inquiries annually. And that number is increasing.

The packaging industry plays a central role in promoting sustainable production and consumption. Sustainability partnerships can drive real change and contribute to sustainable packaging. Company partnerships in sustainability are increasingly seen as a source of innovation that support companies in differentiation, but they also serve as a platform for both product and market development. Collaboration is vital to create meaningful progress in sustainability initiatives and in the development of optimal sustainable solutions for different packaging end-uses.

Over the last few years, our sustainability experts have embarked on developing solutions to help assess the environmental impacts of our label products and to systematically reduce them. The Label Life concept and lifecycle assessment tool, and our RafCycle® recycling solution, are examples of the collaboration we have with our customers, our suppliers and brand-owners. These solutions can help reduce environmental impacts along the value chain and increase our mutual understanding of sustainability issues.

Sustainability is good business. Only by working together can we capture the real value of sustainability. We hope to see the start of many more such partnerships!

Kaisa Vainikka

Global Sustainability Manager
UPM Raflatac

LABEL LIFE AWARDED RECOGNITION IN CHINA

UPM Raflatac has received the prestigious 2015 GoldenBee Corporate Social Responsibility China (CSR) Honor Roll Award in recognition of its commitment to sustainability and particularly the Label Life concept.

Based on the most comprehensive lifecycle assessment in the industry, the Label Life tool helps label printers and end-users understand the environmental performance of UPM Raflatac label products in terms of carbon, water and energy, and the end-of-life impacts of liner recycling. The Label Life concept was launched in Europe in 2013 and has since expanded to other markets. In 2015, it was introduced to Chinese customers and brand owners.

“Over the past decade, we have seen the vibrant development of CSR in China,” comments **Sharon Xiao**, Sustainability Manager, UPM Raflatac Greater China. “We are delighted that our efforts are recognized by the GoldenBee CSR China Honor Roll in this important area.”

Hosted by the Chinese financial journal China WTO Tribune, the GoldenBee CSR China Honor Roll has been published since 2008 and supported by more than 2,500 companies since its launch.

The 2015 awards were presented at the 11th International CSR Forum in Beijing, China in June, 2016. UPM Raflatac is the only company in the label industry to receive the award.



FINAT and Tlmi have cooperated to provide lifecycle assessment (LCA) guidelines for the self-adhesive label industry. UPM Raflatac has been an active contributor to the preparatory work for these guidelines, drawing on extensive in-house expertise in lifecycle assessment and close partnership with both organizations.

Read more on our website!

TEXT HOLLY LARSON
PHOTOS UPM RAFLATAC



PO SHRINK SLEEVE LABEL BOOSTS RECYCLABILITY RATES

Brand owners are demanding more sustainability and recyclability from their packaging solutions. While shrink sleeve films provide unique possibilities for design and decoration, they can create challenges with existing recycling processes. UPM Raflatac has launched a new polyolefin-based (PO) shrink film label that combines the design freedom of shrink sleeve films with high recyclability.



What is the challenge with PET bottle recycling?

Plastic offers a cost-efficient, attractive way to package consumer goods, including food and beverages. However, companies are now actively seeking ways to reduce the environmental impacts of their plastic packaging.

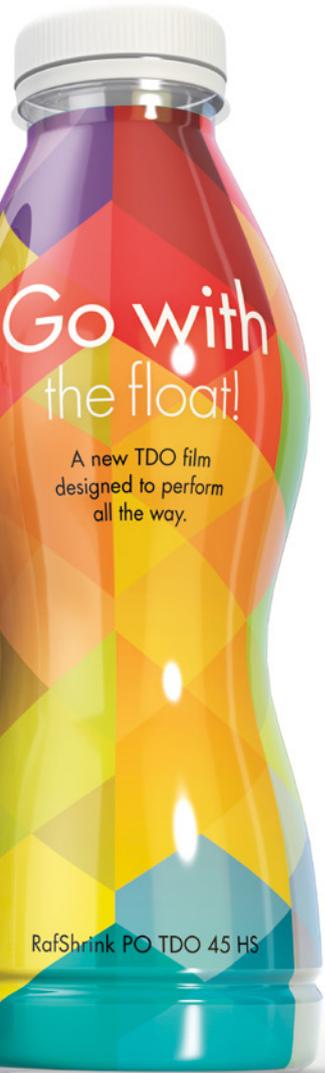
Bottles are a key concern. PET, along with HDPE, are the two resins used for producing almost all plastic bottles. Recycled PET can be used to make new bottles but recycled material suffers from quality issues because PET bottles and label materials often can't be cleanly separated.

Shrink sleeve labels are especially challenging. Coveted by global brands and consumers alike for their attractive, 360-degree product presentation, these labels often cover the entire product. Some full-body shrink sleeve labels can confuse optical sorters and thus complicate the recycling process. New solutions for the problem of PET bottle recyclability are being developed because shrink sleeve label usage is growing.

Why PO instead of PVC and PETG?

PVC and PETG are the materials typically used for shrink sleeves. Being heavier than water, they sink to the bottom of sink-float washing tanks during the recycling process, hence contaminating the clear PET flakes from bottle waste that sink too. Now the collected PET becomes discolored and hazy due to incompatible PETG/PVC and ink residues. As a result, it is unsuitable for reuse in producing the crystal-clear PET beverage bottles brand owners depend on to showcase the majority of their products.

While PVC and PETG labels sink, UPM Raflatac RafShrink labels float due to their low-density polyolefin material – even when fully printed. This makes it extremely easy to remove RafShrink labels from the recycling stream. RafShrink's removability – plus an outstanding detection rate of 92% in NIR polymer sorting – means brand owners can easily acquire the clean, clear recycled PET flakes they need for sustainable packaging, while still using full-body shrink films that drive product sales.



RESEARCH STUDY

A shrink sleeve label recycling study, commissioned by UPM Raflatac and conducted by Plastics Forming Enterprises, compared the label detection and sorting performance of UPM Raflatac’s polyolefin-based shrink sleeve against most commonly used labels, including PETG shrink sleeves.

The results determined that UPM Raflatac’s RafShrink PO MDO 40 HS material provided average detection rates of 92% versus 40% for PETG labels in NIR sorting. As a consequence, it is very easy to remove RafShrink labels from the recycling stream.

The findings mean that brand owners now have new sustainable and recycling-compatible choices for branding and packaging global beverage products.



20X

Plastic production has risen 20-fold over the last 50 years.

*

95%

Most plastic packaging is used only once, meaning that 95% of its value is lost to the global economy.

*

5.5%

Shrink sleeve sales are increasing at 5.5% CAGR and are expected to reach 12,750 million m² in 2018.

*

19%

Shrink sleeve labels have already captured 19% of the total label market.

PVC or PETG labels sink to the bottom of sink-float washing tanks, contaminating clear PET flakes from bottle waste.

Polyolefin-based RafShrink labels float, and clean PET flakes from the bottles can be recovered and reused.



Sources:

“The New Plastics Economy: Rethinking the Future of Plastics” Infographics, World Economic Forum, the Ellen MacArthur Foundation, and McKinsey & Company, January 19, 2016, <http://www.ellenmacarthurfoundation.org/news/the-new-plastics-economy-rethinking-the-future-of-plastics-infographics>

Clare Goldsberry, “Shrink Sleeve Label Market Gaining Ground,” *Plastics Today*, May 5, 2014, <http://www.plasticstoday.com/articles/shrink-sleeve-label-market-gaining-ground>

TEXT HOLLY LARSON
PHOTOS UPM RAFLATAC

“If your company is experiencing challenges printing GHS labels, it may be time to rethink your approach.”



GHS Labeling strategies

READY FOR A RETHINK?

FAST FACTS ON GHS-COMPLIANT LABELING

While Globally Harmonized System (GHS) labeling has been around for years, recent changes to the label itself have put this topic back in the news.

“Rather than simply implement new labels, companies should take this opportunity to reconsider their printing strategies,” says **Paavo Sillanpää**, Director, Global Business Development (Industrial Chemical Labeling), UPM Raflatac. “It’s possible they may be able to drive cost and waste out of their printing operations with a new approach that’s more targeted to their business needs.”

Sillanpää recently authored the technical article **GHS labeling: Is your printing strategy meeting your needs?**, which gives companies a comprehensive overview of their options. The article provides a quick primer on GHS labeling, discusses current labeling challenges companies may experience, and looks at the pros and cons of different printing methods.

The printing technologies covered include thermal transfer printing (one and two-color), sheet-fed laser printing (monochrome and color), roll-to-roll laser printing and color inkjet printing. Companies that produce GHS labels in both small and large volumes and across product portfolios and regions will benefit from these insights as they reassess their printing strategies.

>> **Visit our website to read the article**

What’s new?

GHS labels have changed. Hazardous chemicals and mixtures must have durable labels carrying six standard elements to alert employees and others to handling and exposure concerns. They are: signal words such as “Danger” or “Warning” to indicate hazard severity, hazard statements, hazard pictograms, precautionary statements, product identifiers, and supplier identification.¹ See the before and after images on the next page to understand what’s now required to be compliant.

What qualities must GHS labels possess?

GHS labels, which are affixed to hazardous chemicals, face punishing environmental and usage conditions in industrial environments. As a consequence, label materials should be extremely durable. They must retain print and image quality and stay affixed during transportation and long-term usage.

What if chemicals are shipped?

Chemicals shipped over water must have labels that can stay affixed for up to 90 days if products are accidentally submerged in seawater, to ensure compliance with British Standard BS5609: both Section 2, which governs label stock, and Section 3 which covers printed labels.

Is GHS a global law?

No. It is an international mandate from the United Nations, and each country determines how to address it. More than 65 countries to date have adopted or are adopting GHS labeling.²

Isn't GHS labeling all done now?

No. Businesses around the world must reclassify chemicals to demonstrate initial compliance when their country's regulatory bodies adopt GHS recommendations. However, chemical manufacturers also need to send updated labels with new chemical shipments, on the first shipment after a product change has been made, upon request of the purchaser³, or if a new hazard has been identified.

My business is compliant already. Why should I look into it again?

You may have the opportunity to optimize current GHS labeling business processes with label materials and printing technology that can save you time and money.

Old	New	Old	New
Explosive 	Explosive 	Very toxic/toxic 	Toxic 
Extremely/Highly flammable 	Flammable 	Irritant/Harmful 	Irritant 
Oxidizing 	Oxidizing 	Harmful 	Harmful 
No symbol 	Pressurized gases 		
		Harmful to the environment 	Harmful to the environment 

Sources:

- 1 "GHS 101: Labels," MSDSONline, <https://www.msds-online.com/resources/ghs-answer-center/ghs-101-labels>.
- 2 "10 GHS Facts in 60 Seconds," MSDSONline, undated, <https://www.msds-online.com/resources/ghs-answer-center/10-ghs-facts-in-60-seconds>.
- 3 "The Day After OSHA's Big GHS Deadline: What's Changed?" MSDSONline, undated.

TEXT CATHY WU
PHOTO UPM RAFLATAC

SAFE AND LEGALLY COMPLIANT FOOD AND TEXTILE SOLUTIONS FOR CHINA



The revision of GB9685, China's national food safety standard for the use of additives in food contact materials and articles, started last year. Legal requirements for food contact materials, including labels, will become more stringent in the Chinese market.

"As long as there is a chance that a material will come into contact with food, the use of the additives in that material must meet the requirements of GB9685. UPM Raflatac meets this need with a product range based on the RH03 hotmelt adhesive," says **Junion Zhao**, Director, Films, UPM Raflatac APAC.

"RH03 already meets the requirements of the European EU 10/2011, which concerns food contact approved substances and permitted limits in packaging materials."

RH03 provides strong adhesion even on moist and frosted packaging in cold or freezing packing environments and logistics chains. It is food-safe and environmentally sound, and suits both rigid and flexible packaging. The adhesive is available with label faces for logistics and variable information printing as well as branding.

"Rising living standards in China are promoting a greater awareness of food safety among consumers. Product recalls due to packaging safety risks have been a big cause for concern," describes Zhao. "Food safe solutions like our label materials with the RH03 adhesive therefore support legislative compliance and provide a high level of indemnity against product recalls. At the same time play a role in improving competitiveness and enhancing brands."

APEO free: textile exports protected

Chemically safe labels have become an important consideration for brand owners in China's substantial textile industry, particularly in light of increasingly stringent requirements regarding the chemical composition of textiles in global export markets.

"We now offer APEO-free apparel labeling material," says Zhao. "These label materials adhere without peeling and remove without leaving adhesive residue – guaranteeing that the labels are safe to use and that clothing looks its best."

TEXT RACHEL KNIPPENBERG, HOLLY LARSON
PHOTOS RACHEL KNIPPENBERG

A week in the life of the Americas sales team

Ever wonder what it would be like to be a B2B territory sales manager at one of the world's largest label stock manufacturers? We give you the inside view, as we follow one of our sales professionals **Rachel Knippenberg** for a week.

THURSDAY, MAY 26

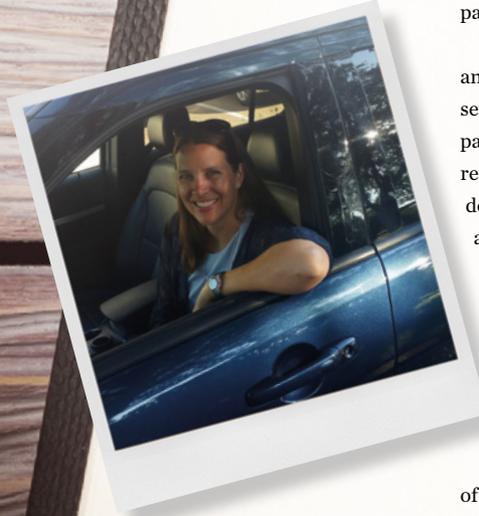
The Memorial Day holiday is fast approaching, so I want to get as much done as possible this week. That means a very early start today – 4:30 a.m. I catch up on emails and also handle paperwork from yesterday's calls.

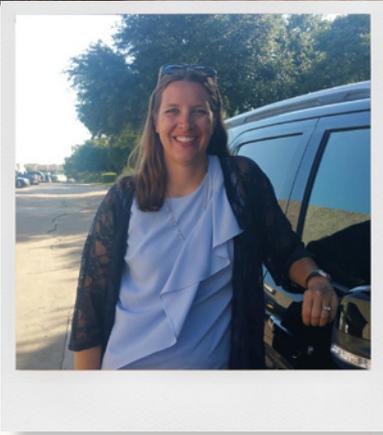
After getting my children ready for school and dropping them off, I head out on the first of several sales calls. Today is a bit more jam-packed than normal, but it's also quite representative of what I do. As sales leaders we don't just do book orders, we also spend quite a bit of time learning about customer needs, shaping business opportunities and making sure our products convert successfully.

At 9:00 a.m., I arrive at one of our customer's sites. Traffic is bad in the Dallas area, so I allotted more than an hour to get here. This label printer has a pre-slit roll of translucent material sitting in one of our distribution centers, but can't access it because the company's account is on credit hold. The challenge isn't that the bills aren't getting paid: It's just that they are getting paid too slowly. I talk to the customer's purchasing and accounts payable team about setting up a payment plan. The company gets the material it needs, and UPM Raflatac sees payment progress. This is a win-win for both of us.

At 11:00 a.m., I drive over to meet with a client who has purchased nine different label stock products from us this year after not buying anything last year. It's nice to have a foot in the door and see it opening.

I check my email between meetings and work on another project – getting product approval and pricing for a thermal transfer





WHO:
Rachel Knippenberg
WHERE:
Based in Texas
WHAT:
Territory Sales Manager
responsible for Texas,
Oklahoma and New Mexico



product with our XRI3 adhesive, which would be used for labeling books at a book manufacturing site. We're about to run trials.

After lunch, I visit another client who is already buying one of our 2.6 mil PP White films and now wants 10,000-foot trimless rolls of 55# semi-gloss paper delivered from our Dallas slitting and distribution center. I share that the delivery times from our Mills River, North Carolina, facility are the same as Kansas City. The customer is going to trial the solution. I'll follow up in two weeks.

For my last call of the day, I meet with another converter who is considering us for direct thermal and thermal transfer products. I've provided pricing and rebate information, and am staying engaged to get the customer to make the switch.

FRIDAY, MAY 27

I head out at 7:30 a.m. on my day's sales calls. I call on my first prospect of the morning, a converter printing vinyl and static cling in addition to non-pressure sensitive signage. I was pleased to have the chance to quote some different opportunities and am hopeful of finding the right fit.

For my lunchtime meeting, I visit a customer and take him to lunch at the local country club. This business produces cotton bale labels made of Tyvek. We'll be working together in the third quarter when the season is in full swing. In the afternoon, I work in my home office, entering sales requests and setting up appointments for next week.

MONDAY, MAY 30

On Memorial Day, I enjoy time off with my family.

TUESDAY, MAY 31

Back to work. I'm still setting up appointments and working on my pre-call planning strategy. The day before meeting with customers, I will email them their current sales data and price quotes. This information focuses our time together.

I also set tasks in Outlook to remind myself to follow up with customers and prospects - finding out if they have any further questions, how sample rolls performed, and whether they'll be placing orders. Typically, I'd handle these tasks on Monday, but I'm a day off schedule because of the holiday.

WEDNESDAY, JUNE 1

Wednesday is a big travel day, because I'm meeting with a client who's located more than four hours away. I meet with the team - the general manager, purchasing agent, plant manager and quality control department - and take them to lunch. We had a problem here. That's never desirable, but we were able to address the issue right away: **Megan Letarte**, our Technical Product Consulting Manager, led the charge on solving the quality issue, while I made sure

outstanding claims were processed quickly. The client is very pleased and is trialing products constructed with our new direct thermal face sheets, with the goal of making the transition in 30 days.

I head home. Traffic is rough, so I roll in the driveway at 7:00 p.m. It's been a long day, but a good one.

THURSDAY, JUNE 2

This morning, I have an appointment with one of our larger clients. We both make lists of items we want to discuss at our meetings, and most of the time they're almost an exact mirror of each other. It's helpful that we're on the same page. One topic we discuss is a new trial we're working on. Everything is going well, which is great news. This client is very happy with our products and services, and business continues to grow.

Before lunch, I stop in to speak with a prospect at a large laser house. The client has trialed our laser material, and it ran well. The customer will be placing a trial order to ship out of our Dixon facility. If that goes well, we'll be stocking pre-slit rolls for them locally. I then spend the afternoon on sales reporting and internal meetings.



NEW GLOBAL OPERATING MODEL

UPM Raflatac is preparing for further growth by adopting a new scalable global operating model. The new model consists of three strategic business units (SBUs) and three market regions. The SBUs (Films, Papers and Specials) are responsible for product offering and manufacturing globally. The market regions (APAC, EMEIA and Americas) are responsible for the customer interface and service.

COME AND MEET US!

Pack Expo
06–09 November,
Chicago, IL

Labelexpo India
17–20 November,
Delhi

Eco-Products
December 8–10,
Tokyo, Japan

CLICK AND LIKE!

You can now find us on these channels – for information on current topics and occasionally off topic too.



The Icehearts team sponsored by UPM Raflatac had the chance to experience the joy of playing this spring. The new kit was also tested in their first tournament.

SUPPORTING SOCIAL INCLUSION FOR CHILDREN

Icehearts has been engaged in child protection activities aiming to prevent social exclusion in Finland for 20 years. UPM Raflatac is supporting this important operation through a three-year cooperation agreement. Donations secure both the continuity of this activity and access to hobbies for children from low-income families.

Through Icehearts, children in need of support gain meaningful sports hobbies, and families receive help with the everyday raising of their children. Teams of pre-school age children pursue a sport of their choice under the guidance of an appointed mentor. The mentor lives alongside the children for 12 years – in practise until they come of age. The aim is to prevent social exclusion, promote social skills and create a long-term, safe adult presence for the children.

The support provided by UPM Raflatac is directed to the Tesoma district in Tampere – the district where UPM Raflatac has operated for more than four decades. In addition to equipment purchases like team shirts, this support assists travel to away games, camps and other valuable collective activities. Other planned events include shared training sessions between the team and UPM Raflatac's staff, and an invitation for the children to visit the factory.

South African operations strengthened

UPM Raflatac has acquired selected assets of the South African label stock distributor Labelcote, part of TIGER Packaging. Labelcote has been trading in the South African market for over 20 years, originally as a partner for UPM Raflatac. Labelcote sells materials throughout South Africa with physical presence in the Durban, Johannesburg and Cape Town markets. After the acquisition, UPM Raflatac will continue to operate the Labelcote-owned slitting and distribution terminal in Johannesburg. In addition to the new Johannesburg terminal, UPM Raflatac currently has sales and terminal operations in Pinetown (Durban area) and Cape Town.

UPM RAFLATAC EXPANDS IN POLAND

UPM Raflatac builds a new coating line at the Wrocław, Poland label stock factory. By introducing a new coating line together with related reel handling and slitting capacity additions the company aims to meet the increasing demand for self-adhesive label stock in Europe. Production of the new line is planned to commence in the first half of 2018. "This is a significant investment to meet the demand growth of our customers in Europe. It further leverages our unique competences, end-use specific product offering and industry leading, optimally located operating platform in Poland," says **Antti Jääskeläinen**, Executive Vice President, UPM Raflatac.



UPM Raflatac's founder inducted into Paper Industry International Hall of Fame

UPM Raflatac's founder and former long-serving president **Juhani Strömberg** has been inducted into the Paper Industry International Hall of Fame. The nomination represents a significant international acknowledgement for Strömberg for his achievements in the paper industry and in advancing industry technology.

Strömberg is considered a pioneer in paper converting, particularly in the self-adhesive label industry, where he started developing water-based adhesives as an alternative to their solvent-based counterparts when working for UPM Raflatac (formerly Raf. Haarla) at the turn of the 1970s.

At the time, water-based adhesive technology was out of the ordinary and constituted a significant development which later revolutionized the entire label industry. Strömberg's work in developing label face papers and release papers has also been significant. His innovations formed a strong foundation for the growth and globalization of UPM Raflatac.

Alongside Strömberg, UPM's **Niilo Hakkarainen** and four other new members from Finland and the United States were inducted into the Paper Industry International Hall of Fame, which now has 135 members.

SAFETY is of paramount importance to UPM Raflatac. We have achieved amazing results by continuously working together and paying attention to safety issues. Since 2011 we have been able to reduce lost-time accidents by a remarkable 79%!

A NEW TERMINAL in Chengdu solidifies UPM Raflatac's logistics network in China. Officially opened in March, the Chengdu terminal is part of UPM Raflatac's expansion program in the Asia-Pacific, which focuses on increasing production capacity and expanding the regional service network.

COOPERATION in the "Rivers for Life" project with WWF Poland continues with another three-year contract. The project embraces efforts towards the conservation and restoration of natural river ecosystems in Poland, and has been supported by UPM Raflatac since 2012.

CLEAN INDUSTRY CERTIFICATION was awarded to UPM Raflatac's Mexico facility as the first of its kind in the label industry. Achievements like this are concrete examples of our promise to provide high-quality, sustainable label materials complemented by the most customer-oriented service in the industry.





The Biofore Company **UPM**

Wines on Ice Brands on Fire!

Ready to capture the market for premium wines destined for coolers and ice buckets?

UPM Raflatac 'Ice' and 'Ice Premium' products keep labels looking solid, bold and vibrant like never before.

Design look beautiful for longer – and so does your outlook for sales.

To find out more about our wine labeling solutions, visit www.upmraflatac.com



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