

TETRA PAK NEWS

Summer 2011



Introduction

Welcome to Tetra Pak News

In this edition, we put the spotlight on innovation in our business and the wider Tetra Pak family. No business like ours can ever stand still: we must always identify, develop and explore ideas for new products, technologies or systems that will benefit colleagues, customers, consumers or the communities in which we operate.

One of our major recent innovations has been Tetra Evero Aseptic, the world's first aseptic carton bottle for milk. This is a major breakthrough for both customers and consumers, as it combines the easy handling and pouring of a bottle with the environmental and cost advantages of a carton. The concept was defined following extensive market research and developed by our industry-leading engineers who created the systems necessary to produce the package in an efficient and cost-effective way. You can read more about this ground-breaking technology, which is already being adopted by dairies across Europe, on page 3.

We have also been harnessing technological developments in other areas to improve the service and support we can provide for customers. For example, Tetra Pak Processing recently worked with Isle of Man Creamery to establish a remote support tool that ensures Technical Services can provide rapid support to the Creamery, without needing to visit the island. There is more information on this and other ways in which Tetra Pak Processing is harnessing technology for customers on page 8.

We are also continuing to develop new ways of improving the way we work within our business, in particular to reduce the impact we have on the environment. Tetra Pak recently established an ambitious new environmental programme to help it work towards the ultimate aim of providing sustainable packaging using only renewable materials, achieving a minimal environmental footprint and creating zero waste. The plan is far-reaching, and will guide the way we work across our global business. You can read

more about the plan – and our passionate belief in the environment – on page 6.

We are continuing to identify new ways in which we can inspire and support people to reduce their own environmental impact, for example by choosing products made from renewable resources or recycling the materials they do use. Our recent media campaign around the new generation of 'green bloomers' was designed to show how children are leading the way for many families on recycling issues. It really is the younger generation that will make supportive behaviour part of everyday life, and this is why we will be working with schools to help them teach children about renewability, as the next stage of our partnership with WWF. We will report back on this in future editions of Tetra Pak News.

Our commitment to innovation is ingrained in the way we do business. It is something I am personally very proud of, and I will share further examples of the progress we are making – and how this continues to benefit the people we work with and alongside – in the coming months.

With best regards.



Rik Jacobs

Managing Director
Tetra Pak UK & Ireland

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Sun-filled oranges are just magic for farmers across the world

Sunmagic, the range of 100% pure fruit juices, smoothies and juice drinks, has built on its already considerable commitment to offering customers the best refreshing drink possible by joining the Fairtrade movement.

Fairtrade products guarantee premium price to the suppliers in order to tackle poverty and improve the quality of life for communities in poorer countries and to support farmers in economically

deprived countries. Now, with 100% pure Fairtrade orange juice, Sunmagic can do just that.

The first three Fairtrade products appeared on shop shelves in 1994, which were Green & Black's Maya Gold Chocolate, Cafedirect coffee and Clipper tea. Now more than 4,500 products have been licensed to carry the Fairtrade Mark in the UK, including Sunmagic's delicious 100% pure Fairtrade orange juice.

An estimated five million people in Africa, Asia and Latin America benefit from Fairtrade, including farmers, farm workers, and their families. This is

something that is important to Sunmagic, which is why they hope to increase their range of Fairtrade flavours in the future.

As part of its wider effort to provide the best possible product, Sunmagic's carton range uses Tetra Pak products and is sourced from renewable materials. The juice strictly uses the best available concentrate from the same source, and is therefore second to none on quality and taste. It is clear people are enjoying what they taste, with Sunmagic selling more now than at any time in history across the country.

Britain's first semi-skimmed brand celebrates 30th anniversary

freshnlo, the UK's first semi-skimmed milk, is this year marking its 30th anniversary and aims to remain a household favourite up and down the country for years to come. The nutritious and low in fat milk is part of Robert Wiseman Dairies, and is proud of its rich history and heritage.

In 1981 freshnlo launched across Scotland and was the very first semi-skimmed milk to hit the UK



market. In those thirty years since the brand launched, it has looked to associate itself with healthy events that reflect the wholesome nature of the milk it contains. With partnerships established with events such as the Great Scottish Run and

Pedal for Scotland, freshnlo has built up a reputation for being a key part of a healthy lifestyle.

The freshnlo design has gone through many incarnations over the past 30 years, but has always retained its core blue and green identity. With its strong branding in place, freshnlo has also relied on something else to help maintain its place in people's fridges.

Since its launch, freshnlo has used the Tetra Brik and Tetra Top cartons to deliver fresh milk to customers. Tetra Brik has given freshnlo a

considerable advantage over competitors, as it has given it an extremely cost efficient solution, providing value for money, and allowing milk to be easily stored in chiller cabinets and at home. The added functionality of a wide choice of openings and closures, from basic to extremely functional, has met with approval from customers from breakfast to teatime.

Here's to the next 30 years!



Nestlé, Tetra Pak and Braskem launch plastic cap derived from sugar canes

Working with Nestlé Brazil, Tetra Pak and Braskem have been able to produce a polyethylene cap using a renewable resource to help promote renewability and combat CO² emissions. The polyethylene is innovative because it is made from sugar cane derivatives, which are polymerized in plastics for cap production.

The new kind of polyethylene cap will be used with Nestlé's UHT milk for Ninho, Ninho Lezinho, Ninho Low Lactose and Molico brands, and the cap will be fitted onto the Tetra Brik® Aseptic product.

The launch represents a landmark in the use of polyethylene made out of 100% renewable raw materials in the food and beverage packaging industry. By using the new cap, Nestlé will be encouraging environmental awareness, providing consumers with a product that makes use of renewable sources for manufacturing its packages.

The polyethylene has been developed by Braskem, Brazil's largest petrochemical company, and hopes are high that the new process will help to reduce the amount of greenhouse gases produced since sugar cane, a renewable resource, absorbs CO² from the atmosphere. If the new polyethylene proves to be popular, the plan will be looking to expand the farming of sugar cane to help absorb further CO² emissions.

Tetra Pak Brazil President Paulo Nigro said: "The use of polyethylene made

out of a renewable raw material is another important step towards our goal of achieving 100% renewable packaging. This demonstrates our innovation leadership and our commitment to support our customers and society in our shared goals of creating a healthier, sustainable planet."

Tetra Pak has a long history of responsible, environmental practices and recently announced an ambitious environmental programme designed to deliver on the company's ultimate

aim of providing sustainable packaging using only renewable materials, achieving a minimal environmental footprint and creating zero waste (see page 6). Currently, all the paper used for the production of cartons in Brazil comes from forests managed in accordance with the responsible forestry management principles, certified by FSC™ (Forest Stewardship Council™).



Tetra Pak Global Sustainability Update

Recently Tetra Pak unveiled its biannual sustainability update which details what Tetra Pak is doing to reduce its impact on the environment, help customers build their businesses, ensure a robust, reliable and far-reaching food supply and improve the health and lifestyles of people across the globe.

Highlights this year included:

- Reaching a 13% absolute carbon reduction since 2005 whilst continuing to grow its business
- Developing dairy hubs in Pakistan, bringing together small groups of farmers, to deliver a unified approach and economies of scale, increasing animal vaccination rates, reducing animal mortality, training tens of thousands of farmers and massively boosting milk collection volumes
- During the 2010 Haiti earthquake, the Food for Development Office's involvement in an existing in-country school milk programme meant that Tetra Pak could swiftly supply millions of milk packs to schools and communities

Pioneering packaging for milk



This Spring saw the launch of another major innovation for Tetra Pak: Tetra Evero Aseptic™ 1 litre, the world's first aseptic carton bottle for milk.

Our ground-breaking new packaging combines the easy handling and pouring of a bottle with the environmental and cost advantages of a carton, bringing compelling benefits to producers, retailers and consumers. It can also keep products fresh for up to six

months due to an innovative sterilization process.

We developed Tetra Evero Aseptic through a blend of thorough market analysis and pioneering production techniques. We designed a range of different concepts and then developed candidate packages, which we tested through intensive market research. In this testing, consumers showed a strong preference for the Tetra Evero Aseptic and praised its handy shape, easy pouring and high-quality feel.

The package and its filling machine, the Tetra Pak A6 iLine, are covered by 14 design and application patents. Technological developments include an industry-first 'gas phase' sterilisation technique and advanced injection-moulding technologies to fuse the top, carton sleeve and capped neck into a ready-to-fill package. In addition, the Tetra Pak A6 filling machine requires just half the space of an aseptic PET line.

Tetra Evero Aseptic also offers a wide range of environmental benefits. The paperboard in the package is made from renewable wood fibre harvested from forests that are certified by the Forest Stewardship Council (FSC) and other

responsible sources. And we have plans to reduce the environmental impact still further. Next year, we will introduce a separable top, so that the cap can easily be separated from the carton sleeve for easier recycling. And in the future we will be making the neck and cap from renewable polymer, as part of our aim to offer a 100% renewable Evero Aseptic package.



We are initially aiming Tetra Evero Aseptic at the ambient white milk market, including non-oxygen sensitive milk enriched with calcium, proteins, fibres (inulin), vitamins A and D and some minerals. This will soon expand to cover a wide range of beverages, including flavoured milk, cream and oxygen sensitive milk.

We have supported the launch with a promotional campaign – 'Designed for Life' – to emphasise how the packaging has been designed to make people's lives easier.



Greeting the ‘green bloomers’

This Summer saw Tetra Pak unveil a new study that shows how children are becoming increasingly aware of the importance of recycling at a young age – and starting to become real agitators for recycling at home. We’ve dubbed this generation the ‘green bloomers’.

The study, which involved research with 2,000 parents across the UK, showed that more than 65% believe children first become aware of recycling between the ages of four and six. The research also found that:

- More than 80% had noticed that their youngest child has already started recycling used materials
- More than one in three (35%) children pester their parents about doing more recycling at home
- More than half of parents (53%) wish they were taught as much about the environment and recycling when they were growing up



Tetra Pak commissioned the study as part of its continuing campaign to raise awareness of carton recycling and to inspire behaviour change among people of all ages. The findings show how children have really taken the recycling message on board and are clearly keen to help the environment. They are also actively helping to introduce everyday recycling habits at home, so they become an established part of daily family life.

Asked to comment on the findings, leading child psychologist from BBC’s The House of the Tiny Tearaways, Elizabeth Kilbey said:

“Not only are very high numbers of children engaging in recycling themselves, just over a third of them are taking the message home and changing the behaviour of their family members. So they aren’t just following school rules, but are really taking the message to heart, having understood its importance.

The decision to change the behaviour of others to support ‘the greater good’ is sophisticated, particularly for younger children.”

The study attracted extensive attention and coverage across broadcast, print and online media, drawing further attention to this important issue.



Recycling update

More than one in three councils go kerbside!

The country celebrated a major recycling milestone this Spring, as Waltham Forest became the 135th council to start collecting cartons at kerbside – meaning that 36% of local authorities now make it as easy as possible for consumers to recycle their used cartons.

This milestone is the latest stage in a major escalation of carton recycling facilities across the UK. Just a few years ago there was very limited carton collection in the UK, even though cartons were recycled in large quantities elsewhere in Europe. But Tetra Pak, and its partners in the Alliance for Beverage Cartons & the Environment (ACE UK), have worked closely with local authorities the length and breadth of the country to help them increase the opportunities for carton recycling for residents in their area.

Combined with a network of 1,500 bring banks, carton recycling now covers 88% of Local Authorities.

Commenting on the milestone, Rupert Maitland-Titterton, Environment & Communications Director at Tetra Pak, said:

“We’re delighted to have reached this important milestone. Tetra Pak has been working extremely hard with its industry and Local Authority partners to drive up carton recycling in the UK – we’ve helped to build a nationwide recycling system in less than four years.

“Our aim remains to help consumers by making cartons as widely recyclable as possible and we’ll continue to work with Local Authorities to further increase kerbside coverage. In the meantime, we’re delighted that Waltham Forest has helped us to reach this new milestone.”

Tetra Pak and its partners in ACE UK are continuing to work with local authorities, but are also helping them communicate with residents to build understanding of how they can recycle used cartons. As a nation, we consume an estimated 58,000 tonnes of paper-based cartons every year for milk, juice, sauces and other liquid foods and drinks – around 2.3kg per

household. This makes the need for carton recycling even more important.

Residents can find out how they can recycle cartons in their area by using the interactive map hosted at www.tetrapakrecycling.co.uk. This site also contains a range of guidance and tips on how people can make recycling part of their everyday lives.



Setting the agenda for environmental performance

We have a long-established commitment to high standards of environmental performance across all Tetra Pak's global operations. We believe this is critical to enabling sustainable and profitable growth, for ourselves and our customers. We achieved, and in some cases exceeded, the targets we set ourselves between 2005 and 2010, but we have a fierce determination to keep improving. This has led us to establish a new set of challenging targets for the next ten years, which we have drawn together in our 'Environment 2020' plan.

We have put these targets at the heart of an ambitious new environmental programme that will help us towards our ultimate aim of using only renewable materials, achieving a minimal environmental footprint and creating zero waste.

The targets are as follows:

- **Climate:** we aim to cap carbon emissions at 2010 levels by the end of 2020, whilst continuing to grow. Given our estimated 5 per cent compound annual growth rate, achieving this goal will mean we need to make a 40 per cent relative reduction in CO₂ equivalent emissions. This target covers both our operations and those of the suppliers we deal with, so will be asking them to meet agreed targets and support customers' activities to reduce their own emissions.
- **Recycling:** we are committed to helping double the global recycling rate of our used beverage cartons by 2020. This will mean that around 100 billion used beverage cartons will be recycled in 2020 alone (if we assume 5 per cent compound annual growth again). We will seek to do this by engaging with everyone we deal with, identifying opportunities to develop new technology, increase the efficiency of collection/sorting schemes and enhance consumer awareness.
- **Responsible sourcing:** by 2020, we aim to ensure that all the paperboard used in our products is Forest Stewardship Council™ (FSC™) certified. We also have an interim target of 50% in 2012. We will continue working closely with our suppliers and other stakeholders to increase access to FSC-certified wood fibre. By the end of 2011, the number of Tetra Pak cartons carrying the FSC logo will reach 16 billion, nearly double 2010 levels.
- **Sustainable products:** we aspire to use 100% renewable materials as we develop our packaging material. Our cartons are already based, in the main, on paperboard from a renewable resource – wood fibre – and we are taking important steps towards increasing the renewable content. For instance, we have signed an agreement with Brazilian producer of green polyethylene, Braskem, in order to launch caps containing renewable polymers (made from sugarcane) in 2011.

To help us achieve these ambitious targets, we will be developing new ideas and investing in innovation across our business. We will also be working closely with customers, partners and suppliers to identify and seize opportunities to improve environmental performance across the whole value chain.

For more information on 'Environment 2020' and Tetra Pak's environmental performance, please visit: <http://www.tetrapak.com/environment>



The dairy industry: a global picture

This Summer has seen publication of the latest 'Dairy Index', Tetra Pak's annual report on trends in the global dairy industry.

The report provides valuable research and insight for dairy producers across the world. It contains a wealth of facts, figures and projections which can help producers identify and respond to emerging opportunities for growth.

This year's Index, which was unveiled in July, shows that Western Europe and North America remain the top two consumers of Liquid Dairy Products in the world – and are expected to remain so in 2020. The average Western European and American will be consuming at least 79 litres a year by 2020 compared to individual consumption of around 63 litres in Latin America, some 45 litres in Asia-Pacific and around 25 litres in Africa.

However, whilst they may remain the largest consumers, per capita consumption is expected to fall in both Western Europe and North America by 2020. Both are mature markets, in which consumers are becoming increasingly focused on

their health and looking at different options. In mature markets like these, demand for lactose free milk, organic milk, fortified and functional milk is expected to rise.

In the United Kingdom, the fourth biggest consumer of milk per capita in 2009, consumers are increasingly looking for lower-fat products, e.g. moving to milk with 1% fat or a lactose-free alternative. Lactose intolerance is a condition thought to affect one in seven people in the UK.

Gail Scotland, Tetra Pak's UK marketing manager, said: "Shoppers are becoming increasingly sophisticated, health conscious and selective in their buying habits. There is growing interest in diet and health, as well as increasing awareness about allergies."

The Index highlights the opportunity for dairy producers to offer more value-added, individualised products to an increasingly segmented market, ever more focused on health and convenience. In the UK, with millions of people commuting and more people living in smaller households or on their own, there is an opportunity to increase the popularity of individualised and portion packs.



The full Dairy Index report is available at www.tetrapak.com/food_categories/dairy/index/pages/default.aspx

New ways of maintaining control



The pace of technological change is providing many new opportunities for Tetra Pak Processing to enhance the service and support it provides to clients.

Innovation creates opportunity

It is not unusual to find Tetra Pak dairy and food processing equipment giving perfectly good service after 30 years or more.

When some of these plants were built, the personal computer was a novelty, but even over the last few years the rate of development in IT systems has rendered older control networks virtually obsolete.

Fortunately, Tetra Pak Processing can offer new IT solutions to upgrade older control systems for a relatively small outlay. One of the major differences between these solutions and older systems and is that they tend to be based on generic software, rather than bespoke units. This means that PCs can be used to control valves, pumps and other

equipment. There are many advantages, including plant 'visualisation' and the ability to improve production records.

Remote monitoring

One of the big advantages of using modern systems, including the latest generation of Tetra Plantmaster (developed on platforms created by the likes of Siemens and Rockwell), is that the entire plant can be monitored remotely.

One of the resources used by Mark Day, Tetra Pak Processing automation account manager, and the Tetra Pak Processing team is MONIT, a utility for managing and monitoring processes, files and software directories remotely. MONIT can be used to carry out automatic maintenance and used in the repair of control systems without having to make a site visit.

Looking to the future

Increasingly, companies are interested in using longer-term maintenance contracts to provide remote, 24/7 diagnostic cover for their systems.

The financial saving can be immediate. For example, in one



case a client noticed the cream content of the product was 1% too high. Using Tetra Pak's diagnostic software, Mark Day was able to trace the problem and make the necessary change to the plant settings straight away, without leaving home.

Looking ahead, Mark predicts that 'cloud computing' will become increasingly important. This means that data can be backed-up automatically and stored in very secure remote servers, with system diagnostics run automatically from remote locations. It also means that the control software itself will not need to be located on the client's premises.

Island solution

The Isle of Man Creamery has recently benefited from upgrading its control system to a Tetra Plantmaster solution.

The Tromode Creamery dates from 1919 and is the only production facility on the island, supplying retailers as well as providing doorstep deliveries. Its Tetra Plantmaster solution includes production control, operator interface, recipe handling as well as functions for production-adapted CIP (Cleaning in Place) and traceability.

In addition, lifecycle support has been provided for the installation. The Service Platform is a remote support tool developed by Tetra Pak which means that the Technical Services team can respond to the creamery's needs without being on the island.

Tetra Pak in the community

Road racing comes to Wales

Tetra Pak has signed up to support a major new sporting event taking place in Wales this Autumn – ‘Etape Cymru’.

This event is a 100-mile challenge, including over 6,000 feet of climbing, which will take place on 9 October 2011. The event will start and finish at Tetra Pak’s site in Wrexham and will run through spectacular scenery across North Wales. It is being supported by the Welsh Government, Wrexham Council, Denbighshire Council and North Wales Tourism.

In addition to hosting the start and finish line, Tetra Pak is also inviting teams of employees, customers and partners to take place in a ‘Tetra Pak Challenge’!

For more information on Etape Cymru, or to take part in the Tetra Pak Challenge please visit <http://www.etape-cymru.co.uk>



Photography: Adam Tranter



Follow in the steps of British Cycling champion Sam Harrison on the UK’s second closed road cycling event.

Taking the renewable message out and about

In May, Tetra Pak launched the next stage of its ‘Renewable Idea’ campaign with WWF-UK, which is designed to build awareness and understanding of the environmental benefits of renewable resources.

The launch featured a brand new online game – Tree-Vital Pursuits – a daily quiz that tests players’ environmental knowledge and links to a new donation counter which converts the points players generate into donations from Tetra Pak to WWF-UK. It also featured a new ‘Pledge’ initiative, which asks users to sign up and pledge to use more renewable resources in their daily lives.

The team have been out meeting lots of people over the Summer, including at the Royal Highland Show in June where over 250 visitors pledged to live more renewably and answered a Tree-Vital Pursuits question.



WORKING TOGETHER FOR HEALTHY FORESTS



For more information on Tree-Vital Pursuits, our pledge programme or our wider partnership with WWF-UK, please visit www.renewableidea.co.uk

DID YOU KNOW?

You can read and download
Tetra Pak News at
[www.tetrapakrecycling.co.uk/
tp_news.asp](http://www.tetrapakrecycling.co.uk/tp_news.asp)

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