

Newsletter — Spring 2023

Editors message for Spring 2023

Hello and welcome to our newsletter which is published by The Midlands Packaging Society. As a society our board and members are passionate about all matters that embrace the world of packaging. We are keen to share with everyone that has an interest in this subject, our experience and knowledge.

Our Editor has selected a number of interesting news items for this issue from around the world to keep you abreast of developments in this exciting field. If you would like to join us in our monthly meetings, where we discuss the current and future trends in this industry, we would be pleased to welcome you.

CONTENTS:

[Heinz Cooks Up Saucy Solution....!!! :\)](#) **1**

[IAI Study Highlights Vital Role Of Aluminium Cans In A Circular Economy](#) **2**

['Packaging as a Service' for reusable food packaging](#) **3**

[BOMBAY SAPPHIRE® Collaborates with Jean-Michel Basquiat's Estate to Release a Special Edition Bottle in Canada](#) **4**

[Which Sustainable Packaging Solutions are Advancing the Circular Economy?](#) **5**

[Earth's Ally Debuts Post-Consumer Recycled \(PCR\) Packaging](#) **6**

[Mars Wrigley China Launches First Package Containing 100% rPET in a Local Chocolate Brand](#) **7**

[Cascades' closed cardboard basket for fruits and vegetables wins a People's Choice Award](#) **8**

Heinz Cooks Up Saucy Solution to an Age-Old Problem with the Introduction of the Ketch-Up and Down Bottle!!! :)

Heinz, makers of the world's favourite ketchup have dreamed up a double ended ketchup bottle that could provide the solution to problems facing fans worldwide. The Heinz Ketch-Up & Down bottle has two lids that mean no matter which way up you store it or use it, ketchup connoisseurs can access every last drop.

The concept was created by the team at Kraft Heinz, who dedicate their time to studying ketchup fans closely and realised that everyone seems to have their own peculiar preferences. While some would squeeze it as if it owed them money, others prefer to shake it like a maraca. Some like to store it upright while others place it upside down or on its side.



On April 1st 2023 Passant El Ghannam, Head of Marketing at Kraft Heinz MEA, commented: "At Heinz, we are consumer obsessed and we rely on insights like this one to fuel innovation and bring consumers more of what they want. So, building on the success of our upside-down bottle which we released in 2010, we saw an opportunity to solve a problem

that many of our fans face. If scaled up, it could be game changing for ketchup lovers. The Heinz Ketch-Up & Down bottle gives fans more of what they love – the great taste of Heinz!"

With 2022 net sales of approximately \$26 billion, the Company is committed to growing their iconic and emerging food and beverage brands on a global scale.

As global citizens, they're dedicated to making a sustainable, ethical impact while helping feed the world in healthy, responsible ways. www.kraftheinzcompany.com

IAI Study Highlights Vital Role Of Aluminium Cans In A Circular Economy

Research commissioned by the International Aluminium Institute (IAI) into the recycling of three beverage container materials – aluminium, glass and plastic (PET) – has shown that aluminium cans best support a circular economy.

The study shows that compared with aluminium cans, more glass and plastic bottles end up in landfills because they are not collected. In addition, the losses in the recycling system once collected, is three times higher for PET and glass bottles than for the aluminium cans.

On behalf of the IAI, Eunomia Research and Consulting studied data in five regions: Brazil, China, Europe, Japan and the US. It looked at the end-of-life processing losses for aluminium cans, glass bottles and plastic (polyethylene terephthalate - PET) bottles. The study also looked at the collection, sorting, reprocessing and thermal processing, closed-loop recycling and open-loop recycling.

Ramon Arratia, Vice President Global Public Affairs at Ball Corporation, noted that "While no drinks container has achieved its full circularity potential yet, aluminium outperforms glass and plastics (PET) at all stages of the waste management system. Today, aluminium cans are the most recycled beverage containers globally. Once the aluminium can is collected from the consumer, it has an unrivalled sorting, reprocessing and remelting efficiency rate of 90% compared with glass (67%) and PET (66%). On this basis, aluminium can be described as a material of choice for a circular economy. This is especially important when we look at the carbon reduction potential of recycling."

Andrew Wood, Group Executive Strategy & Business Development at Alumina Limited, said "The number of aluminium cans collected at the end of their life is about 18% higher than PET bottles and 28% higher than glass. A greater proportion of PET and one-way glass bottles end up in landfills or waterways because they are not collected. In a decarbonising world, this is likely to contribute to higher demand for both recycled and primary aluminium."

The aluminium can was first mass-produced by Coors Brewing Company in the 1950s to improve the taste of beer and provide a more sustainable container than steel cans. It

is therefore reassuring to see from this study that the environmental goals of that ground-breaking new product all those years ago are still being realised.

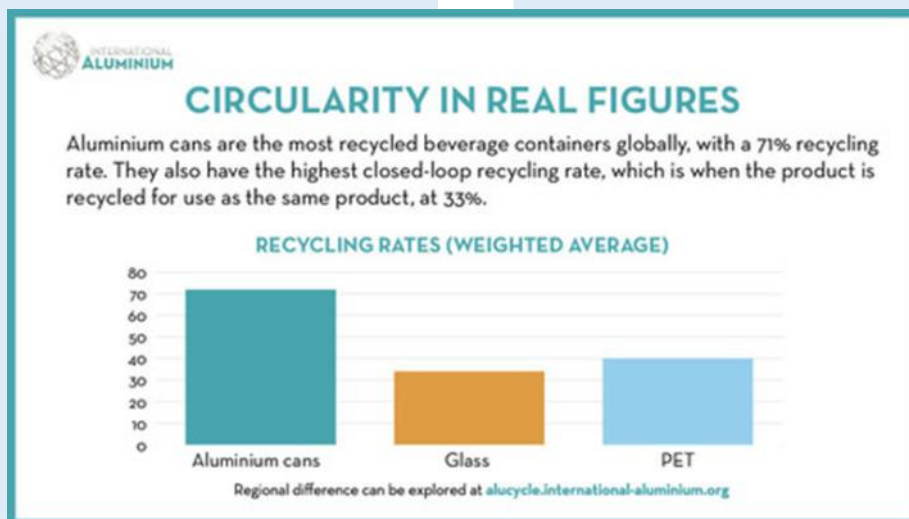
Marlen Bertram, IAI's Director, Scenarios & Forecasts, says, "As the Institute celebrates its 50th anniversary this year, we have been reflecting on our organisation's long history of data collection, analysis and modelling. Aluminium is one of the most recyclable materials on the planet and the IAI is campaigning to ensure end-of-life products are returned into the recycling loop given the economic and environmental benefits of the metal in our global economy. Comparing recycling rates of different materials is meaningless if you don't know how the rate is measured and into what products the material is recycled back to. This study is the first public study that comprehensively analyses the extent of recycling and losses of three beverage containers in different regions. By increasing the precision of identifying where major losses occur, the study could provide solutions to improving the rate of recycling for all materials. We are clearly in a new era in circularity transparency."

Emilio Braghi, EVP Novelis & President Novelis Europe said "Collection and sorting systems are essential to increasing circularity and to unlocking the full potential of infinitely recyclable materials. We need a policy framework that incentivises true recycling and circular systems, where at the end of their life, beverage containers are recycled again

and again – without loss to quality. Aluminium is perfectly suited for multiple product-to-product recycling. We need to move our thinking from waste to valuable resource – reusing existing material to produce new packaging and thereby saving precious natural resources, energy, and lowering emissions."

The International Aluminium Institute (IAI) is the only body representing the global primary aluminium industry. The Institute has the most comprehensive global data on Aluminium with more than 40 years of analysis on production, consumption, energy use and environmental impact. For more information, visit international-aluminium.org, or connect with them on LinkedIn or Twitter.

Global Aluminium Cycle 2021 (international-aluminium.org)



The Midlands Packaging Society News—Spring 2023

Amcor third Lift-Off winner to deliver new 'Packaging as a Service' for reusable food packaging & leverage nanotechnology to aid recycling

Amcor has announced a \$250,000 investment into smart reusable food packaging start-up circolution, the third winner of Amcor's Lift-Off initiative. Launched in April 2022, Amcor Lift-Off targets breakthrough, state-of-the-art technologies that will further advance Amcor's goal to make the future of packaging more sustainable.

Founded in Frankfurt, Germany, in 2019, circolution's smart reusable packaging solution builds on Germany's existing bottle-deposit system, offering fast-moving consumer goods brands a simple pay-per-cycle service. This service delivers a significant reduction in carbon footprint per manufacturing cycle versus standard single-use packaging. circolution has developed an innovative model which provides a complete circular service: smart reusable packaging, reverse logistics, data analytics and impact measurement.

Available in a range of shapes, sizes and materials, the 'packaging as a service' solution requires no upfront investment and has been designed to be fully compatible with existing supply chain and scaled operations standards.

Frank Lehmann, vice president of Corporate Venturing and Open Innovation at Amcor, said: "We are delighted to be in a position to support circolution at this early stage, and see great synergies with both our existing products and other investments as we work toward a circular system for packaging.

Amcor is passionate about supporting the development of a circular economy, and innovation is essential to achieving our goals. Collaboration and investment drive progress, and it is this ethos that led to the formation of the Amcor Lift-Off initiative. Our team continues to discover the most impressive innovative start-ups across the industry, and we look forward to seeing what fruits this latest partnership will bear."

Amcor is already working to provide the lid-sealing solution for circolution's first product in the coffee, cacao, and powder sector, launched in 2022, using Amcor's recyclable [AmFoil™](#) [AluFix®](#) peelable can lidding. This investment highlights Amcor's efforts to make all products either recyclable, reusable or compostable by 2025.

Agreement reached to leverage nanotechnology in recyclable and compostable packaging

Last month (March 23) Amcor entered into a joint research project agreement with Nfinite Nanotechnology Inc. to validate the use of Nfinite's nanocoating technology to enhance both recyclable and compostable packaging.

In the proof-of-concept phase of the project, Nfinite's coating technology will be applied to Amcor's existing recyclable and compostable packaging material. The objective is to deliver an oxygen barrier to improve performance for recyclable and compostable packaging. Once validated, the next stage of development will seek to ensure the products are optimized to Amcor's manufacturing processes and analyse additional substrates like bio-based materials to create more sustainable applications.

This project marks an important milestone in the partnership between Amcor and Nfinite that began in 2022 when Nfinite was selected as an Amcor Lift-Off winner. In addition to receiving \$250,000 in seed funding, Amcor Lift-Off start-ups have the opportunity to work with Amcor's Research & Development team to create new applications that can advance both companies' efforts toward driving circularity.

Amcor Vice President of Corporate Venturing and Open Innovation, Frank Lehmann, said, "This joint research project agreement is an important step, and showcases Amcor's solution-based commitment to sustainability and innovation. Collaborating with innovative start-ups like Nfinite, particularly in the early stage of this exciting new technology, is one more way we are working to advance our shared sustainability goals."

Chee Hau Teoh, co-founder and CEO at Nfinite Nanotechnology, said, "We're very pleased to have Amcor's support in advancing our ambitions to deliver this nanocoating technology in packaging applications. Once scaled up, we can begin looking for pilot companies eager to leverage this technology."

Amcor is a global leader in developing and producing responsible packaging solutions for food, beverage, pharmaceutical, medical, home and personal-care, and other products. Amcor works with leading companies around the world to protect their products and the people who rely on them, differentiate brands, and improve supply chains through a range of flexible and rigid packaging, specialty cartons, closures, and services. The company is focused on making packaging that is increasingly lighter weight, recyclable and reusable, and made using an increasing amount of recycled content.

Nfinite Nanotechnology is a venture-backed advanced material company based in Waterloo, Canada, that aims to build a more sustainable world through the advancement of compostable and recyclable packaging.

The Midlands Packaging Society News—Spring 2023

BOMBAY SAPPHIRE® Collaborates with Jean-Michel Basquiat's Estate to Release a Special Edition Bottle in Canada

Bombay Sapphire® has announced the Canadian arrival of the brand's highly anticipated artist Special Edition bottle, which pays homage to cultural icon and prolific artist Jean-Michel Basquiat. The beautiful collectable shines a light on Basquiat's fearless creativity and their joint mission to make the art world more accessible to all who have a passion for self-expression, a part of the brand's ongoing 'Stir Creativity' platform.

The Special Edition bottle features one of Basquiat's earliest works, his Untitled (L.A. Painting). Never before licensed and only displayed to the public once, it is a masterpiece influenced by the surrounding remote environment of Venice Beach, L.A where Basquiat found security and solitude away from the hustle and bustle in New York in 1982. Exhibited in Basquiat's second ever show, the piece features many of the key motifs that are associated with his work: the crown, the bird, the coin and the skull which are all beautifully collaged over soft hues of blue. Through the social commentary behind his graffiti inspired artwork, Jean Michel created a global legacy and has greatly influenced modern and contemporary art.

With a shared mission to inspire and enable creativity in us all, BOMBAY SAPPHIRE and the Basquiat Estate bring to life this special edition bottle, which aims to highlight his fearless creativity and meaningful artistic expression that transcends generations.

"We're thrilled to be launching the special edition bottle in Canada to honour Basquiat's dynamic creativity and offer an entirely new way to experience art," said James Fisher, Senior Brand Manager BOMBAY SAPPHIRE. "This collaboration was born from a shared mission to shine a light on the arts and inspire creative self-expression



'King Meets Queen' Cocktail (CNW Group/BOMBAY SAPPHIRE®)

within everyone. BOMBAY SAPPHIRE is leading a global charge to stir creativity - a call to arms for everyone to unlock their creative potential."

"We are excited to collaborate with BOMBAY SAPPHIRE to share Jean-Michel's work with those passionate about his art, life, and journey," said Lisane Basquiat and Jeanine Heriveaux of the Basquiat Estate.

Recognised as the ultimate canvas for cocktail creativity that inspires bartenders and drinkers to experiment with flavour and versatility, BOMBAY SAPPHIRE and the Basquiat Estate have created a signature cocktail – the "King Meets Queen". Inspired by Basquiat's sharp colours, stark lines and stabbing contrast, this cocktail is made to stand out and shine next to the Special-Edition bottle this February and beyond, as an ode to Basquiat's constant curiosity.

The Midlands Packaging Society News—Spring 2023

IDTechEx Discusses Which Sustainable Packaging Solutions are Advancing the Circular Economy

Creating a circular economy is an essential sustainability target for governments, brands, suppliers, and the public. A key driver is the risks that plastic consumption, which is expected to double globally by 2050, poses to the environment. Not only is plastic waste overflowing in landfills, but a significant portion is mismanaged and leaks into the environment: the OECD estimates that nearly 80 million tonnes of plastic waste was mismanaged globally in 2019.

Addressing plastic waste pollution requires solutions from every sector, but an especially important industry is the packaging sector, which utilises about one-third of annual plastics production. Packaging, especially for fast-moving consumer goods (FMCG), utilises significant amounts of single-use plastics that quickly end up in municipal waste streams. Therefore, sustainable packaging is a critical component needed to advance circularity. IDTechEx's latest market report, "[Sustainable Packaging Market 2023-2033](#)", explores the sustainable materials, leading players, and technology trends driving the field and presents a forecast for the sustainable packaging market segmented into 21 different materials. Three key segments emerge from these 21 different materials: mechanically recycled plastics, chemically recycled plastics, and bioplastics.

Mechanically Recycled Plastics

Mechanical recycling of plastics will be critical to pushing sustainability in the packaging sector forward. Mechanical recycling is the main source of recycled plastics, especially polyethylene terephthalate (PET), currently used by FMCG companies in products like beverage bottles and detergent containers. Not only does mechanical recycling prevent the further extraction of petroleum for virgin polymer production, but it is also the best end-of-life option for plastics in terms of carbon footprint.

As such, there is major market activity across the supply chain - from materials suppliers and recycling companies to packaging manufacturers and multinationals – to increase the recycled content of plastic packaging. IDTechEx predicts mechanical recycling will be the dominant source of sustainable plastics for packaging from 2023 to 2033. But as the latest [IDTechEx report](#) outlines, there are significant economic and technical problems preventing mechanically recycled plastics' usage in sustainable plastic packaging, such

as contamination, recycled material prices, downcycling, and more, which many players are looking to address.

Chemically Recycled Plastics

Conventional mechanical recycling methods are the primary choice for producing recycled plastic, but mechanically recycled plastics can often have worse material properties than their virgin equivalents. This creates the problem of downcycling, which keeps recycled plastics from being used again in packaging; however, this is where advanced recycling enters the picture. The allure of advanced recycling methods, like solvent extraction, pyrolysis, and depolymerization, is that they use thermochemical reactions to allow used plastic waste to be made into 'new' virgin plastic, circumventing the issue of downcycling. There is also potential for processing mixed plastics, including polyolefins like polyethylene (PE) and polypropylene (PP), another issue facing mechanical recycling.

For these reasons, materials suppliers and FMCG companies are investing in chemically recycled plastics, many of which will end up in sustainable plastic packaging. However, chemical recycling is not a magic bullet; it faces numerous economic, environmental, and ethical barriers to adoption. Still, by 2030, chemical recycling will grow into a notable contributor to the sustainable packaging market.

Bioplastics and Biobased Materials

Yet, even if all the plastic produced every year were 100% recycled, there would still be a need for virgin feedstock to meet growing consumption. Bioplastics - plastics which are synthesized from biobased feedstocks - can replace incumbent fossil-

based plastics here. Given their biobased origin, these plastics are a renewable alternative to incumbent petroleum-based plastics.

Many biobased polymers, including biobased PET and PE, polyhydroxyalkanoates (PHAs), nanocellulose, and others, are being explored by major materials players and startups for application in packaging. Other biobased materials, like non-wood plant fibres and mycelium, are also seeing increasing attention for circular packaging solutions. IDTechEx's analysis of 95 startups operating in sustainable packaging identified over twenty different biobased materials with over US\$4 billion in investment. With such market interest, [IDTechEx forecasts](#) that bioplastics will be a consistent contributor to decarbonisation efforts.



Earth's Ally Debuts Post-Consumer Recycled (PCR) Packaging

Earth's Ally, a Florida (USA) based leading producer of safe and effective pesticides, will debut packaging made from post-consumer recycled (PCR) plastic this spring.

Made with recycled high-density polyethylene (HDPE), the new 24-ounce, 32-ounce and 1-gallon bottles divert recycled plastic from landfills, reduce greenhouse gas emissions and alleviate the environmental impact of drilling for virgin petroleum.

"Gardeners told us they care about sustainability, and we listened. With every product we develop, our team is committed to minimizing our environmental impact," said Scott Allshouse, CEO & President of Earth's Ally. "We're proud to be the first company in our category using PCR plastic, and that we did it without cost increases to our retailers or consumers."

PCR plastic is material that has been recycled by consumers, collected by waste haulers and



Earth's Ally packaging made with PCR plastic will feature a "Made with Recycled Materials" embossment.



13-14 June 2023

**Environmental Packaging Summit 2023
The Eastside Rooms, Woodcock Street,
Birmingham**

At the 2023 summit, attendees will see the latest innovations and services from exhibitors, hear industry experts share their take on the current market, and provide a perfect opportunity for individuals to raise their company profile as well as to network on the latest sustainable developments.

MPkgS to attend the summit to promote local society and Institute activities and membership opportunities.

MPkgS members will receive a 10% discount on tickets.

Use **Midlands10** as the discount code when booking

To register : <https://summit.packagingnews.co.uk/eps2023/en/page/2023-home-page>

re-processed for the manufacturing of new goods. It is chemically identical to ordinary polyethylene and can be recycled by consumers again.

To build consumer awareness and encourage recycling, Earth's Ally packaging made with PCR plastic will feature a "Made with Recycled Materials" embossment

Earth's Ally believe families should not have to choose between products that work and products that are safe around children and pets. They are committed to protecting pollinators and offer a complete line-up of Bee Safe® gardening products that have been scrutinised and tested by independent laboratories to ensure they are both effective and safe for people, pets and the planet when used as directed. For more information, visit earthsally.com.

The Midlands Packaging Society News—Spring 2023

Mars Wrigley China Launches First Package Containing 100% rPET in a Local Chocolate Brand

The efficient use of limited resources is key to the future of a low-carbon, green economy. The 14th Five-year Plan for the Development of Circular Economy issued by the National Development and Reform Commission of China in 2021 advocated development of a circular economy and an increase in resource recycling efficiency. At the same time, public acceptance of resource recycling is also at an all-time high. According to the 2022 Report on Chinese Consumers' Recognition of rPET, issued by the China Food Information Centre, 82% of respondents accepted the replacement of traditional plastics with rPET (recycled PET).

Mars wanted to contribute to a circular economy where packaging material never becomes waste. Mars Wrigley China has taken a series of actions since 2019 to reimagine and redesign its packaging, making sure it is reusable, recyclable or compostable through innovation and advocacy. In 2023, Mars Wrigley China will make further progress in sustainable packaging innovation. They have launched their first package containing rPET in the Chinese market via a local chocolate brand, Cui Xiang Mi (CXM). The 216g canister lid of CXM is made from 100% rPET. It demonstrates a new chapter in recycled contents application for Mars Wrigley China's package portfolio.

Exploring new solutions via recycled content application

Recycled content application is essential to improving the closed-loop for a circular economy. However, the high-value application of recycled materials is still a challenge for the industry due to an immature industry value-chain and high cost.

Take rPET as an example. According to the data published by the Plastic Recycling Branch of the China Synthetic Resin Association, China, a major PET producer and supplier to the world, recycled 5.68 million tons of PET scrap in 2020. But most of this was downgraded to rPET fibers used in textiles. They would normally be land-filled or incinerated at the end of their lifecycle. The circular economy advocates closed-loop recycling of resources to extend their life cycle and reduce the natural resources exploitation.

This year, Mars Wrigley China achieved a breakthrough for recycled content application on chocolate core SKUs. The new 216g canister lid of CXM adopted 100% Post-Consumer Recycled PET with no change to the consumer experience due to appearance or tactile aspects. We want to inspire consumers with more green and sustainable moments in addition to our tasty products. Compared to



the virgin PET, rPET contributes lower carbon emission and less petroleum consumption. We estimate that the launch of the new CXM rPET canister lid could save 36 tons of virgin plastic in a rolling year^[1].

The circular economy is a complex system. Without a sound infrastructure, the recycling value chain breaks easily and cannot form a closed loop. Mars Wrigley China believes advocacy can contribute to circular economy development. In 2022, Mars China, together with other industrial leaders and national associations, kicked off China's first industry-wide flexible collection pilot - Flexible Plastics Reborn - to build a full-chain and closed-loop recycling system in China for flexible packs. The program aims to collect 50000 tons of flexible packaging waste by the end of 2025. Mars Wrigley expects this program can uplift recyclability for flexible packs and provide more resources and energy saving.

Next step: this kind of rPET lid will be adopted by more brands over the rest of this year, such as SNICKERS and M&M'S. Mars Wrigley China aims to save 300 tons^[2] of virgin plastics in a rolling year.

[1] Source: Internal data, subject to fluctuation.

[2] Source: Internal data, subject to fluctuation



The Midlands Packaging Society News—Spring 2023

Cascades' closed cardboard basket for fruits and vegetables wins a People's Choice Award

Cascades' closed corrugated basket for fruits and vegetables was awarded the People's Choice Award in the Eco-packaging Initiatives category at the DUX 2023 Grand Prix Gala that was held at Marché Bonsecours in Montreal to celebrate leaders in the agri-food industry.

Each year, DUX invites the community to vote for a company that stands out in its category as a leader in food. The Eco-packaging Initiatives category recognizes a solution that reduces the impact of packaging on the environment through environmentally responsible practices and life cycle management.

The new closed cardboard basket, launched in January 2023, was designed according to recognized eco-design principles, and is part of a circular economy approach. Made of recycled and recyclable cardboard, it is an alternative to the hard-to-recycle packaging currently on the market. It has been prequalified by How2Recycle® as widely recycled in Canada and the United States. The result of the expertise of a multidisciplinary team, the basket's innovative design allows for flat shipping, reducing transportation costs and the need for storage space. A mounting jig, specially designed for both basket formats (2l and 3l), will also speed up and simplify operations for producers.

Two Cascades products were among the finalists for the Grand Prix DUX in the eco-friendly packaging initiatives category: the northbox® OCEAN and the closed corrugated basket for fresh produce. These two solutions support the achievement of one of the objectives of its fourth Sustainability Action Plan, that 100% of its manufactured packaging be recyclable, compostable or reusable by 2030.

"We are very proud to learn that our eco-design efforts are being recognized by the DUX Grand Prix community. Seeing



Cascades' closed cardboard basket for fruits and vegetables

two Cascades packaging solutions among the finalists and our new closed paperboard basket being recognized as a People's Choice Award motivates us to continue pushing the limits of innovation for our customers by pursuing our mission: to improve the well-being of people, communities and the planet by providing sustainable and innovative and solutions that create value," said Mario Plourde, President and Chief Executive Officer of Cascades.

The closed basket also received a Distinction Award in the sustainable design category at the PAC Global Award 2023. Cascades was recently recognized by Corporate Knights as the 20th most sustainable corporation in the world and the first in the Containers and Packaging category.

Ron Iwaszkiewicz FIMMM

It is with deepest sadness that I have informed my fellow MPkgS colleagues of the sudden, unexpected death of my good friend and fellow Michigan State University UK Summer School coordinator, Ron Iwaszkiewicz.

Ron passed away on the 23rd April this year. May he rest in peace.
Keith Barnes



Tuesday 23 May 2023 The Packaging Networking Lunch Royal Air Force Club, Piccadilly, London

Join other like-minded packaging professionals from across the spectrum for a 3-course lunch at the RAF Club in London.

This popular luncheon event returns after an absence of three years following the pandemic restrictions and offers the wonderful opportunity to network and catch up with friends and colleagues.

Tickets are £72.50 per person.

Click here to register <https://www.eventbrite.co.uk/e/the-packaging-lunch-raf-club-london-tickets-579162008157>

For more information about each society, please contact:

Keith Barnes, MPkgS

Email: keith@keithbarnes.com, Tel: 07775 696078

Gary Freeman, LSEPkS

Email: garyfreeman@clara.co.uk, Tel: 07710 244081