

President's Word

We are definitely in the right industry!

Pierre Pienaar*

We are fast approaching 2 years into the pandemic and the packaging industry remains in the spotlight as we continue to search for innovative solutions to sustainable packaging and e-commerce design demands. Across the world the human spirit has been amazing as we find ways to re-establish the industry to a new normal.

The pace of global change is increasing, creating uncertainty about the consumer preferences and behaviours that will affect the future of the packaging industry.

Here are some recent developments:

- There is a need for new and recycling and processing technologies, that can be commercialised, implemented, and promoted, if sustainability requirements are going to be met
- We will continue to see shifts in our industry and it will mean that companies, brands, manufacturers, and retailers need to adapt to this ever-changing landscape over the coming year.
- There will be a need for packaging manufacturers and brands to develop and commercialise recyclable package innovations although in many cases the capabilities to recycle them do not yet exist.
- There is talk that sustainable packaging will be superseded by 'responsible' packaging, thus taking a more practical approach where brands can promote, and consumers can understand and act upon.
- There is more pressure on non-recyclable plastics packaging consumption which
 hopefully will result in more easily recyclable and sustainable packaging materials
 such as recycled PET as well as paper and board, not forgetting a reduction in
 excessive secondary packaging.
- Rising real incomes in Asia and other developing regions will see more spending on packaged products, including food, luxury products and cosmetics.
- Flexible packaging to replace traditional packaging, where high-barrier films and retort stand-up pouches will replace rigid pack formats, such as metal tins and glass jars, for a wide range of food products.
- Consumer demand for convenience in food should show an increase in consumption
 of microwavable ready meals, more portable packaging, packaging for on-the-go
 consumption, and convenience features, such as easy-open and reseal components.

The packaging industry continues to grow at an alarming rate across the world. Smithers recently released their forecasts predicting that the global packaging market is to reach \$1.05 trillion in 2024. We certainly are in the right industry for growth but at the same time we need to be mindful that the packaging produced must align with, as well as meet,



the global sustainable guidelines.

The WPO along with ECR Community (Efficient Consumer Response) in Europe, has just released (4 October 2021) a Global Circular Packaging Guide. This will certainly assist all countries to meet their packaging obligations in the sustainability world.

My thoughts are with those affected by the virus around the globe. On behalf of all at the WPO, I wish you, good health and safety. Take care and best wishes.

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From the Editor

Responsibility is the next sustainability

By Liliam Benzi*

With these words - Responsibility is the next sustainability - David Luttenberger, from Mintel's Packaging Trends team, opened the presentation of a sustainability report in Latin America. According to him, to change 'sustainability' for 'responsibility' - and therefore 'sustainable' for 'responsible' and 'sustainable packaging' for 'responsible packaging' - is justified because the term sustainability has been overused and used incorrectly to the point that final consumer is questioning its credibility.

Responsibility is the next sustainability

The Mintel Packaging Team has coined the terms and recommended that 'responsible', 'responsibility' and 'responsibile packaging' supplant 'sustainable', 'sustainabile', 'sustainabile', 'sustainabile', 'sustainabile', 'sustainability' and 'sustainable packaging', believing that the latter have been overused, misused and exploited to the point that consumers are numb to them and their context.

The terms, and more importantly, the meanings and actionability behind 'responsible', responsibility, and 'responsible packaging' are more intimate, and reflect a more easily understood context for consumers. Responsibility is intuitively understood and carries the burden of a personal connection. It incites actiona-bility toward the greater issues challenges and solutions associated with our planet, its people, consumer products, and of course, packaging.



In addition, the consumer tends to understand more clearly what it means to be responsible; the concepts contained in sustainability end up generating some confusion. And, unfortunately, some companies do not contribute to dispel these doubts; on the contrary, they create a smokescreen with the term, 'marketing' it.

Another important point is that today, consumer values 'small actions' more than 'big claims'. So, instead of trying to impact the consumer in a meteoric way, genuine changes towards sustainability of brands, products, and packaging, must be reflected in concrete and easily perceptible results.

Mintel's experts agree that consumers have no intention of eliminating packaging: what they expect is access to environmentally, socially, and economically optimized packaging. And the companies that, in addition to this real optimization, manage to create empathy with the consumer, via packaging, showing that the product and the brand are really there to help them, will come out ahead. On this same trajectory passes the consumers education process.

Another relevant point raised in Mintel's survey is that consumers are seeing more clearly the relationship between climate change and their purchasing options. In Brazil, for example, 77% of consumers agree that climate change will have effects on the food and beverages they consume. With this, they will increasingly seek to be more responsible and buy brands aligned with this purpose of responsibility.

Going a bit further, it was clear that consumers find it cool that companies show respect for the environment. But the question at the end of the day is: what are you really doing to help me be a more responsible consumer? As said, the consumer wants to turn sustainable into something 'action-able' and personal.

At this point, comes the concept of 'carbon handprint', in allusion to the 'carbon footprint', which definitely has a more personal footprint. While responsibility is a more intuitive concept for consumers, the 'carbon handprint' is related to actions where the consumer can evaluate the footprint of the goods and services he buys and uses. It is the company and the packaging - helping them to become more responsible and thus more sustainable.

In the LATAM universe, Brazilian consumers are years ahead on truly sustainable demands. Mintel research shows that they simply won't commit to quality or familiarity with sustainability; they expect concrete action. As the three big topics of this new responsibility, Mintel suggests:

- · responsibility/sustainability is not an all or nothing proposition;
- packaging is not the enemy;
- it takes empathy and education to make a real difference.

It is also positive to realize that even during the pandemic, the environmental issue remained alive in the consumer's mind, and I dare say that in many cases it became more alive since people had more time and more information to think about it.

And this thinking comes in handy with the legislation and recycling labels that are popping up more and more in Latin America and that draw attention to the disposal of packaging. In tow comes an avid consumer for eco-friendly packaging, but again, they really need to understand what this means and they don't want to feel lost amidst far-fetched concepts and terminology.

About being recyclable or having recycled content, Mintel research indicates that the idea of recyclable is more aligned with current consumer expectations of helping the environment. If this is the case and you work with recycled content, make it clear, as much as possible, that recycled content does not mean, necessarily, being recyclable.

People react - and believe - what they see, so it is up to companies to prove what they are doing. Here arises the principle of 'show and tell' design - show from a beautiful design but explain, so that the consumer can understand, and use icons that are consolidated and endorsed by recognized bodies known by this consumer.

We definitely live in an era where conscious consumerism will dictate the new rules and where an 'eco responsible' packaging will be protagonist as long as it is equally accessible and fits in the budget. A tangible packaging in all senses.

For companies, here's a tip: simplify your speech, present clear metrics, and prove that there is a positive personal impact on your products, packaging, and branding!



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Liliam Benzi

Message from General Secretary

We will meet again soon!

Writing this article, I'm still a bit enthusiastic: I've been to a trade show last week. About packaging. In Germany. With real people, having real discussions. Meeting nice friends from Europe, having coffee with them. A stage program with at least half of the speakers doing live presentations (Nerida: Ok, Australia was too far away, but very good to have you there virtually!).



I'm talking about Fachpack (www.fachpack.de/en), the packaging show of NürnbergMesse. Smaller than in other years, for sure, but very crowded. They were running a detailed hygiene concept to fight Covid (vaccination, testing, masks, distance, and comprehensive online tools). Nobody knew in the days before the show, but it was a big success. I can't describe that feeling of absolute happiness for me as participant. WPO joined the EPIC area there and we organized a presentation slot on stage.

What I want to say: we will meet again, in person, in a near day! It's necessary and it will be good!

Meanwhile, according to the actual Covid19-Situation our WPO Board Meeting in November 2021 will be held virtual again. The WPO Meeting program will start on Monday, 22nd of November with the Executive Meeting (restricted to the executive members of WPO only). On Tuesday, 23rd of November, you are invited to take part in our parallel working group meetings and a webinar on packaging recycling in Indonesia and our new guideline for recycling. The World Star Judging will be done on Wednesday, 24th of November. Our crowning finale on Thursday, 25th November will be the WPO Board Meeting.

Soon, you will get the invitation by email with all the links and agendas of the meetings. Please prepare properly for the meetings, as our time there will be limited again, as in the last virtual sessions. But I guess, we are all experts meanwhile in doing it that (zoom) way!

One important thing to mention left: since mid of September, Tanja is on her maternity leaf. All runs well for her personally so far (and I won't make jokes about that big, special pack she has to deliver soon ...). The handover process to Ulla run well and she is handling the WPO Secretariat like a long time professional. It's time to get to know her a bit better. Ulla, your stage:

"Hello everyone, I am 24 years old and I'm originally from Bavaria, but now I've fallen in love with beautiful Vienna and the good coffee. I am really looking forward to the new tasks and even more when we, hopefully, can all meet in person. If you have any questions or problems, please feel free to contact me."

Thx, Ulla! So, if you have any questions about the upcoming meeting or anything else, just contact us via any channel you prefer! Otherwise, see you soon at our meetings in November!

Ulla Hruschka & Barbara Zotti

WPO Secretariat info@worldpackging.org

Johannes Bergmair

WPO General Secretary j.bergmair@worldpackaging.org

Around the World

Competition for the best packaging in Ukraine

In April 2021, competitions for the best packaging and label were held in Ukraine, organized by local WPO member, the Club Packagers of Ukraine (www.upakiour.com.ua). 47 samples, from 23 Ukrainian companies, representing 10 cities, took part in the competitions.



The jury consisted of well-known experts in Ukraine and abroad, headed by Valery Krivoshey, Honorary President of the Club Packagers of Ukraine. 23 packages were awarded with the 'Ukrainian Packaging Star' and 4 labels were winners of the 'Ukrainian Label'

At the same time, it was held a competition among young designers, the 'Packaging of the Future' with the participation of 45 packages and labels, presented by students from 9 academies. The first 03 places were: Zoryana Ostapets, Luka Shavdatuashvili and Polina Makarenkova, students of the National Academy of Fine Arts and Architecture. They are all students of Professor Vitaly Shostya.



The competition was supported by Flexores, Geidelberg, UkrPEC and the Union of Designers of Ukraine. The awarding of the winners took place on June 3, 2021. An all winners are eligible to WorldStar, WPO global packaging competition.

For more information, contact Veronika Khalaydzhi , President Club Packagers of Ukraine by e-mail club-pack@ukr.net.

In Spain, Liderpack awards is on!

Organised by WPO member, Graphispack Asociación (www.graphispack.org) and Fira de Barcelona's Hispack trade fair, the Liderpack awards are the most important prizes awarded in Spain in packaging and POS material. The local packaging industry joins more than 2,100 companies that employ 74,000 workers.

Annually the award promotes and recognises the innovation and creativity of these companies and professionals. The jury is formed by professionals and experts from various areas such as packaging, POS, design,

logistics, marketing and advertising compose the jury.



The Liderpack 2021 award ceremony will take place during Hispack on May 2022 at Fira de Barcelona's Gran Via venue.

For more information, contact Vanesa Armijo, Commercial and Events Director of Asociación Graphispack by e-mail varmijo@graphispack.org.

WPO presents at the Brazilian Packaging Congress

WPO supported the Brazilian Packaging Congress, organized by its local member, ABRE (Brazilian Packaging Association – www.abre.org.br) that brought together packaging companies, businessmen from the consumer goods and digital retail industries, and experts from the international scene to debate the transformation of the consumer market, consumer, and dynamics of retail and its reflexes for the brands and the packaging industry.



Based on the central theme "The role of packaging in the new challenges for Brands", the Congress aimed to promote the discussion about new perspectives of competitiveness and construction of value in the consumer market, placing the future at the center of business, discussing the transformations and its consequences for the entire packaging and consumer goods chain.

On a global level, this edition counted with the support of the WPO and one of its members, the Argentinian Institute of Packaging (IAE – www.packaging.com.ar). Among the keynote speakers, Pierre Pienaar, President of WPO, delivered the opening speech.

Packaging as part of the Milan Design Week



For the occasion of the Milan Design Week (Sept 04-10), the Italian Packaging Institute (www.institutoimballaggio.org), a WPO member and promoter of the Best Packaging contest as a program of the Ethical Packaging Charter Foundation (www.fondazionecartaeticapackaging.org), organized a show that intended to lead the world of packaging design and business, through a dialogue between ethics and technological innovation.

The heart of the project was the interpretation of the 10 values of the Packaging Ethical Charter: responsible, balanced, safe, accessible, transparent, informative, up-to-date, forward-looking, educational and sustainable. Each of the 27 finalists competing for the Best Packaging 2021 award designed their own packaging by finding inspiration in the 10 values.

The exhibition concept was an imaginary dialogue between the storytelling of the 10 values, by the shots of the photographer Claudio Bonoldi, and the finalist projects of the Best Packaging 2021 contest. The visitor was led inside a path, made of suggestions and objects representing daily life. The exhibition also aimed to show the design steps of the packaging solutions.

The result was a synthesis between the ideal and the real; the desire to achieve a hypothetical perfection and the needs of safety, hygiene, protection, transport, communication and service that packaging should provide.

According to Anna Paola Cavanna, President of the Italian Packaging Institute and the Ethical Packaging Charter Foundation, "packaging is an essential part essential of our life and allow us to enjoy goods and services. And it is also always under close observation, for the legislation, for the aspects of sustainability that cannot be postponed, and for the continuous solicitations of the market and consumers. The excellent result of this contest is an example of how companies are ready to respond to new challenges, especially in terms of eco-design. We understand that companies need precise guidelines for a clear and complete communication with citizens."

AIP releases 'Sustainable Packaging Design Case Studies' for the industry



WPO member in Australia, AIP (Australian Institute of Packaging – www.aipack.com.au) is pleased to announce the development of a series of Best Practice Award-winning examples of innovative Sustainable Packaging Design from across Australia and New Zealand.

All of the case studies have been recognised in the annual Australasian Packaging Innovation & Design (PIDA) Awards and over 95% have gone on to receive global recognition for their innovative Sustainable Packaging Designs through the WorldStar Packaging Awards. Some of the ANZ winners have also received this global packaging award organized by WPO.

The AIP Sustainable Packaging Design Case Studies are available at http://aipack.com.au/pida-awards-sustainable-packaging-case-studies/.

Marina Altayó is the new President of Graphispack

On June 21th, the virtual Ordinary General Assembly of the Graphispack Association, WPO member in Spain, elected Marina Altayó, Sales Director Southern Europe at XSYS Global/Flint Group Iberia, as President. The new Board is formed by: Marina Altayó (President), Javier Riera-Marsá (Vice President), Jordi Quera (Vice President), Carlos Aguilar (Treasurer) and Manuel Julián (Secretary).



<u>The new president of the Spanish Packaging Association, also</u> elected in this occasion, <u>is</u> Julio Berdún from Markem Imaje.

For more information, contact Vanesa Armijo, Commercial and Events Director of Asociación Graphispack by e-mail varmijo@graphispack.org.

AIP representative on newly-formed ANZPAC Collective Action Group (ACAG)





The Australian Institute of Packaging (AIP – www.aipack.com.au), a WPO member, is pleased to announce that the Institute has a representative on the ANZPAC Plastics Pact newly-formed Collective Action Group (ACAG), Nicole T Garofano.

The ANZPAC Plastics Pact (ANZPAC) is a collaborative solution that brings together key players behind a shared vision of a circular economy for plastic, where plastic never becomes waste or pollution.

Together through shared knowledge, investment and industry led innovation the purpose is to implement solutions tailored to Australia, New Zealand and the Pacific Islands region.

ANZPAC is the first in the Oceania

region and second regional Plastics Pact to become part of the Ellen MacArthur Foundation's global Plastics Pact network, with Pacts in Africa, Europe, Latin America and North America. As an international challenge, Plastics Pacts address the transnational nature of the issues related to managing plastic by providing a consistent approach for global supply chains dealing with plastic waste travelling across our borders, moving from a linear approach to a circular economy for plastic, in which it never becomes waste or pollution.

"Being accepted as a member of the ANZPAC Collective Action Group (ACAG) as a representative of the AIP for Australia and New Zealand is such a privilege and a thrill",

states Nicole T Garofano. And adds: "This opportunity extends my commitment to create change in the way plastic packaging is generated and managed in the ANZPAC region. My goal is that through AIP representation on the ACAG, members' expertise can be shared to support the achievement of Pact targets. The collaborative value of being part of the ANZPAC Plastics Pact will also become evident. Having AIP on the ACAG invites industry innovation to support the ANZPAC value chain to further the achievement of a circular economy for packaging in this region."

For more information on the ANZPAC Plastics Pact visit www.anzpacplasticspact.org.au.

From the Board

WPO recognised the 'International Day of Awareness of Food Loss and Waste' on 29 September

The 'International Day of Awareness of Food Loss and Waste' was designed to make a clear call to action for both the public and private sectors to prioritise actions and move ahead with innovation to reduce food loss and waste.



"It is known that 1/3 of all food produced in the world is wasted and when food is lost or wasted, all the resources that were used to produce this food - including water, land, energy, labour and capital - go to waste. Environmentally food that is lost or wasted is responsible for 8% of global greenhouse gas emissions. If food waste were a country, it would be the third largest GHG emitter behind the USA and China", explains Pierre Pienaar, WPO President. According to him, "packaging can play an integral role in minimising food waste at the start of the value chain so that waste can be prevented in the households".

"Avoiding food waste is a critical packaging issue and one that food producers, manufacturers, brand owners, retailers and consumers need to better understand. Without adequate intuitive packaging design features and fit-for-purpose packaging, food can potentially be wasted all the way through the supply chain to the consumer. By modifying packaging designs and ensuring that Save Food Packaging Guidelines are followed food waste and loss can be minimised and/or prevented", completes Nerida Kelton, WPO Vice President Sustainability & Save Food.

Both WPO Executives agree that the most innovative and intuitive Save Food Packaging uses design features that can contain & protect, preserve, extend shelf life, easily open and reseal, provide consumer convenience and portion control; all the while meeting global sustainable packaging targets.

Opportunities for packaging design to minimise food waste can include better facilitation or communication around portion control, date labelling, extension of shelf life, protection, resealability and openability, serving size, food safety/freshness information, information on storage options and improved communication on packs.

WPO has been working on the issue of Food Waste and the role that packaging plays for many years now and as the organisation developed a special award category for innovative and intuitive 'Save Food Packaging Design' in the annual WorldStar Packaging Awards. As Nerida Kelton explains: "The Packaging that Saves Food Special Award is designed to raise the profile of the critical role of packaging to reduce food waste and therefore reduce product's overall environmental impact and recognises companies that

are developing innovative and sustainable packaging that minimises food losses and food waste, extends shelf life and improves the supply of food. The WPO encourage all businesses to consider entering this award category to help showcase Best Practice Save Food Packaging Design across the globe."

How to be part of the 'International Day of Awareness of Food Loss and Waste' initiative?

"Begin in your own home", advises Pierre Pienaar, WPO President. To help with this, WPO has provided some ideas and tips on how to minimise food waste at home.

- Learn the difference between A Use By date and a Best before Date. Share this knowledge with your workplace, friends and family
- Buy smaller packs that suit your household numbers
- · Plan Ahead and only buy what you need
- · Don't cook more than you need
- Buy resealable packaging
- · Buy Freezer ready meals
- Look at innovative ways to use leftovers in more meals
- Store Food in the right places e.g.: freezer vs refrigerator vs room temperature
- Set your refrigerator to the correct temperature
- · ALWAYS donate extra food to neighbours, friends or foodbanks
- Compost your food waste
- · Get some chickens
- · Nominate a few Meat Free Days during the week
- Let the WPO know what steps you have made to help minimise food waste in your home, work and extended family.
- Spread the message on social media #FLWDay #reducingfoodlossandwaste #stopfoodwaste #savefoodpackaging #worldpackagingorganisation

WPO prepared a special edition of 'World Pack Talk Show', with Nerida Kelton, interviewed by Liliam Benzi, about the 'International Day of Awareness of Food Loss and Waste'. Access it at WPO YouTube

https://www.youtube.com/watch?v=IDfMju4EGzA&list=PLk84A5sL-GIEWGdKz0NQCppMNT-kOTqQ4&index=1

From the Market

Did you know that intuitive packaging can minimise food waste?

The most innovative and intuitive Save Food Packaging uses design features that can contain & protect, preserve, extend shelf life, easily open and reseal, provide consumer convenience and portion control; all the while meeting global sustainable packaging targets.

Opportunities for packaging design to minimise food waste can include better facilitation or communication around portion control, date labelling, extension of shelf life, protection, resealability and openability, serving size, food safety/freshness information, information on storage options and improved communication on packs.

Two stand out packs that were recently recognised in the 2021 Save Food Packaging Design category, in the PIDA awards, organized by WPO member Australian Institute of Packaging (AIP – www.aipack.com.au), were Junee Lamb for Agriculture and Edgell Supa Crunch for Food Service.

Junee Lamb (Junee Lamb and Sealed Air for CRYOVAC brand Total Bone Guard)



Meat products ending up in landfill contributes to over 20% of the carbon footprint of total food waste. An additional issue for meat products is leaking packs which causes unnecessary food and water wastage. Product sent from Junee Lamb were arriving damaged at the next point in the supply chain and non-conformance reports indicated that lamb packaged in previous shrink bags were failing and yielding food waste in the order of 4,300kg per week. The significant volume of water required to produce the defective product was also being wasted in the previous packs. The move to CRYOVAC TBG put an end to leaking packs, food and water waste for Junee Lamb.

The vacuum shrink barrier bags are designed to provide a significant shelf life of 90 days. This is particularly important for the export market where long chilled shelf life is required. The design provides tough puncture, tear and abrasion resistance, high oxygen barrier properties, with built-in bone guard protection in areas that need it most. By identifying the areas of the bag at risk of puncture/abuse (based on cut packaged), bone guard can be purposefully positioned on the bag to protect these areas. The 150um bone guard patch ensures the efficient use of materials while delivering maximum protection and shelf life. The lamb will better withstand the rigours of production, storage, and distribution and that also means less waste. In this B2B application, multiple (up to six) meat cuts are packed into CRYOVAC TBG vacuum shrink barrier bags driving better product: packaging ratio and decreasing the amount of packaging used. The bag is Australasian Recycling Logo (ARL) compliant and recyclable through soft plastics collection programs.

Edgell Supa Crunch (Simplot Australia) for Food Service



To meet the needs of the Foodservice channel, Simplot developed Edgell Supa crunch, a new chip designed to stay crunchy for up to 40 minutes throughout the challenging delivery process.

To complement and aid maintaining the crunch during delivery, Simplot designed an innovative and sustainable pack that has a raised and ventilated floor and just the right amount of ventilation on the sides and top to allow steam condensate to escape while retaining heat.

This pack utilises the stack effect where air is drawn into the carton at the base and then vents at the top of the carton allowing moisture filled air from the chips to rise and escape. The relatively shallow carton is designed to allow the chips to spread out, so they are not on top of one another. The one-way venting that the stack effect promotes works well in balancing heat retention and moisture escaping, promoting quality for food delivery.

The product has instructions on the pack as to how to use it, and how to effectively extend the life of the chips to keep hot and crispy and therefore not wasted. This product has been designed to extend the life of the product through keeping the product crispy and hot. If the customer finds that the product has cooled too much the packaging has been designed in a way that it can be reheated in a microwave for 20 seconds which extends the life of the product reducing the risk of spoilage due to cold soggy chips.

The pack was designed with tamper evidence for product security and is stackable allowing for easier distribution of bulk product and reducing the risk of crushing. The board is fully recyclable, FSC certified and has been optimised to reduce the amount of board used.

Australian Food Waste strategy

The National Food Waste Strategy (Australia), that aims to halve all food waste that heads to landfill by 2030, provides a framework for collective action across the ecosystem.

Packaging Technologists have the opportunity to minimise food waste at the start by incorporating the AIP Save Food Packaging Design guidelines into their NPD process.

Marketers can spotlight the SFP design features as a point of difference and send a message to the consumer that the brand is actively trying to minimise food waste from paddock to plate.

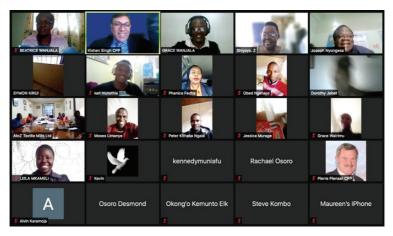
Embedding Save Food Packaging design features at the NPD stage ultimately reduces the product's overall environmental impact at the start of the value chain, which minimises food wasted in the household.

Thanks **Nerida Kelton**, Executive Director of Australian Institute of Packaging (AIP) and WPO Vice President Sustainability & Save Food, for contributing with this article. For more information, contact her by e-mail nerida@aipack.com.au.

Education

Packaging training programs continue a total success

In August, WPO sponsored the training 'Packaging Design and Development for a Circular Economy' organized by its member IOPPK (Institute of Packaging Professionals Kenya – www.ioppk.com) and supported by another WPO member, APO (African Packaging Organisation – www.africanpackaging.org). Trainer was WPO Ambassador, Kishan Singh, and there were 32 participants, including 10 from Tanzania.



"The theme was chosen because environment is an important issue in Kenya, particularly because the country is the headquarters of UNEP (United Nations Environment Programme). The statement that by 2050 the world will have more plastics in the sea than fish needs an urgent response. WPO believes in the importance of educational programs on Packaging Design and Development towards a circular economy and sustainable concepts", states WPO President, Pierre Pienaar. He also reminds that Packaging Education is in the DNA of WPO's strategy in order to guarantee "Better quality of life through better packaging for more people",

Besides Kenya, WPO had a busy agenda of training courses in the second half 2021, that included:

- Indonesia WPO Masterclass Food & Pharma Training August
- Jordan WPO Regional Packaging Technology Training September
- World WPO Packaging Technology Training September
- Georgia WPO Packaging Technology Training early October

The agenda also included a CPP (Certified Packaging Professionals) Development Education & Training program scheduled for October 2021. "The idea, in this case, is to train the participants on how to become a CPP", explains Henky Wibawa, WPO Vice President Education. CPP is a certification created and licensed by WPO member in USA, IoPP (Institute of Packaging Professionals).

For more information on WPO packaging training programs contact Henky Wibawa by e-mail henkywibawa@worldpackaging.org.

WorldStar

2022 WorldStar Packaging Awards is open for entries



On June 9th, WPO (World Packaging Organisation – www.worldpackaging.org) organised the prestigious hybrid WorldStar Ceremony for 2021 winners, with over 250 people attending, from 53 countries across the globe. The ceremony was co-hosted by WPO President, Pierre Pienaar and Vice President Sustainability & Save Food, Nerida Kelton.

During the ceremony, WPO announced 194 winners from 32 countries, including the winners of the Special Categories (Marketing, Sustainability and Packaging that Saves the Food) and the prestigious President's Award. Furthermore, Ralph Moyle, CPP FAIP received the Lifetime Achievement Award for 2021. The video of the ceremony can be accessed in the YouTube link https://linkd.in/dWVVp-G and all the list with the winners is also available in the webpage www.worldstar.org.

After concluding the remarkable WorldStar ceremony, WPO is happy to announce that the entries for WorldStar 2022 are open until October 15, 2021. "We encourage every WPO member across the globe to help us promote the largest and most prestigious global packaging award. We are confident that we can even better the number of entries registered in the 2021 edition: 345 from 35 countries", states Pierre Pienaar, WPO President.

Packages eligible for WorldStar are those that have already received a national or regional packaging award recognised by WPO. "In its 54th year, WorldStar is one of the major events of WPO. As always, our aim is to promote packaging innovation in various areas, proving that a good package can be an essential solution to many of the modern problems, especially food safety, save food and sustainability", adds Pierre.

The schedule for the 2022 edition of WorldStar Packaging Awards is the following:

- 15 October 2021 Closing date for entries
- November 2021 Judging Process.
- 15 December 2021 Announcements of results
- May 2021 Awards Ceremony and Gala Evening.

For general enquiries on the WorldStar Packaging Awards contact Soha Atallah, WorldStar Coordinator soha.atallah@worldpackaging.org or visit www.worldstar.org.

WorldStar Student

Entries are open for the 2021 edition



Entries for the WorldStar Student Awards 2021 are open and close on 1st November 2021. This international student award programme is a key aspect of the WPO objective of 'Better packaging for more people" by discovering and attracting talent into the global packaging industry.

The purpose is to expose students to the world of packaging and the industry at large. Through participation, students tackle projects that illustrate their potential and test the skills that are required for the art and science of packaging. Students gain insight into the role packaging plays in the supply chain and marketing of a product as well as the

benefits and functionality of packaging.

The students eligible to participate are thew ones that have been awarded in a local competition recognized by WPO. For more details and the easy on-line entry process go to www.WorldStarStudent.org.

Technical Article

Barriers against migration from food packaging

By Philippe Dubois*



Time and again, "toxic food packaging" appears in the headlines. Consumers are led to believe that hazardous substances can migrate from the packaging into the food and thus endanger health. The Joint Industry Group (JIG) of the WPO member, Swiss Packaging Institute (SVI – www.svi-verpackung.ch) is working with scientific partners to promote food-safe packaging.

Now the project "Migration into food from closures of boxes made of recycled cardboard with an internal functional barrier" has been processed and completed.

The Joint Industry Group on Packaging for Food Contact (JIG) is an association of companies along the value chain led by SVI. The players join forces in projects and agree that the migration of undesirable substances from the packaging into the food must be prevented. This should be done according to market-based and risk-based criteria.

In the discussion about food-safe packaging, the terms MOSH and MOAH usually come up. These abbreviations are used to describe two different groups of chemical compounds that occur in mineral oil. However, it has not yet been proven whether and in what concentrations these substances can be hazardous to health.

In a first project of the JIG, the barrier effectiveness of inner bags in boxes made of recycled cardboard was investigated. As a result, the "SVI Guideline 2015.01_Inner bags" was published at the beginning of 2016 and received a great deal of attention throughout Europe.

In the summer of 2015, SVI launched the project "Barrier Coating for Recycled Cardboard" with the submission and testing of test materials from various international companies. Nine European companies supported the project financially and with test materials. A measurement method was developed under the direction of the Zurich Cantonal Laboratory. The tests were carried out in Zurich as well as at the Papiertechnische Stiftung PTS in Heidenau, Germany.

In this project, the effectiveness of barrier solutions on recycled board through the gas phase was considered. The first results of the submitted test materials were presented to the project funders on May 25, 2016. The findings obtained from the first project phase showed that the developed measurement method needed to be further adapted and developed.

The second phase of the project was characterized by the investigation of migration through the closures of the boxes. The development of a measurement method, as well as the requirement that the migration of all non-evaluated substances from recycled paperboard into food be below the 1% limit, was summarized in the document "Migration into food from closures of boxes made of recycled paperboard with an internal functional barrier." The report was published in the journal: "Packaging Technology and Science" on June 23, 2021.

In most cases, it concerns the contamination of food by mineral oils, one of the groups of substances capable of migration. These can enter the food at various stages of production, with waste paper or recycled cardboard packaging being one of the main sources of migration into the food.

The projects mentioned above therefore focused on the use of barriers in recycled cardboard. With the requirement to increasingly use recycled plastics in food packaging in the future, new exciting projects are opening up for the JIG.

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Technical Article

Microplastics are not a packaging problem

By Philippe Dubois*



Microplastics have been the talk of the town for a few years now and - as always - packaging is one of the main culprits for tendentious media and the uninformed public. The Swiss Packaging Institute (SVI – www.svi-verpackung.ch), a WPO member, briefly summarizes the known facts here: they show that microplastics are not a packaging problem.

Since 2015, when the German Federal Environment Agency warned of "risks to the environment and water bodies from the use of plastic particles in skin creams, peelings, shower gels and shampoos", microplastics have increasingly come under the scrutiny of the media and the public.

Some so-called quality media and various dubious environmental protection organizations, in their typical anti-reflection, initially blamed it primarily on gelittered packaging. Today, based on numerous serious scientific studies and assessments, we have long known that packaging has practically nothing to do with the problem of microplastics. Nevertheless, decades of packaging bashing have apparently left ineradicable notions in the minds of certain journalists and environmentalists.

What is microplastic?

Microplastics are small plastic particles less than 5 mm (5000 μ m) in diameter. A very small proportion of microplastic particles are produced directly for use and are added as fillers to cosmetics or toothpaste, for example, and are also used in baby diapers. By far the largest proportion of microplastic particles, however, is produced by the decomposition of plastic products or by the decomposition of plastic waste from households and industry.

How much microplastic ends up in the environment?

A 2020 study by EBP Schweiz AG commissioned by the Federal Office for the Environment (FOEN) does not give a specific total quantity for plastic particles under 5 mm for Switzerland. From a 2018 Fraunhofer Institute study for Germany, about 33,000 tons of plastic particles under 5 mm can be extrapolated as the annual Swiss emission amount. In 2014, the EPF Lausanne determined about 91,000 microplastic particles per sq km of surface in Swiss waters. According to Pro Natura, more recent extrapolations of water samples have shown that there are 8133 billion microplastic particles in Lake Zurich. In the Rhine near Basel, more than 200,000 microplastic particles are said to float per sq km of water surface.

How dangerous is microplastic?

Currently, there is no completed scientific study of the health risks of microplastic particles for humans. Research is also in its infancy when it comes to the impact of microplastics on flora and fauna. In 2019, the Australian University of Newcastle published a shocking extrapolation from 51 global studies: according to this, a person ingests five grams of microplastics per week, primarily through food. This is equivalent to the weight of a credit

card. However, there are major regional differences. The highest levels are found in the USA and Asia. An average value for Switzerland cannot be derived from the study. How much microplastic a person ingests depends on where they live, their living conditions and their diet.

Where does microplastic come from?

It is now clear that microplastics originate to the very smallest extent from packaging. Most microplastics come from completely different sources, as the FOEN study from 2020 shows: tire abrasion is by far the largest source in terms of volume. The tire abrasion released annually is estimated at around 10,700 t for Switzerland.

From sports fields and playgrounds (e.g. artificial turf), 1120 t of microplastics are released annually via drainage and resuspension. Around 1000 t of microplastics are generated during the construction and demolition of buildings, and a further 320 t or so through the weathering of building facades. In addition to tire abrasion, Swiss roads contribute around 930 t of shoe sole abrasion, 770 t of road marking abrasion and 330 t of abrasion from sweeping machines. Washing synthetic textiles also accounts for a significant proportion: around 650 t of microplastic fibers enter the wastewater from Swiss washing machines.

The total abrasion from industrial machines is around 420 t and the abrasion from cleaning plastics is around 200 t. Finally, so-called littering introduces around 2700 t of macro- and microplastics into soils and water bodies every year. This mainly includes disposable tableware and agricultural film, but also packaging. It is not known exactly what proportion is attributable to packaging. Incidentally, cosmetics only account for around 15-20 t per year.

Can microplastics in food and cosmetics come from packaging?

No, basically not. There is practically no migratable free microplastic in the inner walls of packaging. At most, it is possible that consumers ingest plastic particles, for example, by extremely scraping out plastic cups with a knife. There is no risk whatsoever when packaging is emptied normally. If food and cosmetics are indeed contaminated with microplastics, then the microplastics originate exclusively from the filling material.

Conclusion

Microplastics in the environment are a problem, but their impact on humans, flora and fauna cannot yet be clearly named and quantified. It is clear that only a very small proportion of the amount of microplastics released into the Swiss environment each year comes from littered packaging. And it is also clear that the amount of microplastic ingested by humans every day does not come from the packaging, but from the filling material, i.e. from contaminated food and cosmetics.

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Special Article

Why 'Smart Packaging'?

By Shruti Parikh*



WPO Corporate Partner, Takeda is a patient-focused, values-based, R&D-driven global biopharmaceutical company committed to bringing 'Better Health and a Brighter Future' to people worldwide. Our passion and pursuit of potentially life-changing treatments for patients are deeply rooted in over 240 years of distinguished history in Japan. We are committed to bringing better health and a brighter future to patients by translating science into highly innovative medicines. Our R&D efforts are focused on four therapeutic areas: Oncology, Rare Diseases, Neuroscience and Gastroenterology.

The packaging is an essential component for better product experience and in pharmaceutical industry as it is the first interface of a brand with the patient. By creating smarter packaging, brands are able to engage their patients digitally in a new and innovative way while also promoting adherence. Smart packaging refers to the package that links the physical world with the digital world, connecting pharmacies, manufacturers, patients and digital channels. By utilizing new technologies to become more than just a mere container, allows packages to be more communicative, dynamic, individualized, and actualized.

Smart Packaging is an umbrella term that could be used to describe different types of packaging - active packaging and intelligent packaging. Active packaging focuses on enhancing functionality, while intelligent packaging puts the focus on communication such as the packaged content's status, or other messaging. Broadly, we can classify smart packaging benefits in three categories: Patient Experience, Product Integrity and Sustainability.

Patient experience

Last year changed how people experience and get hold of products and services. The way we get hold of things changed in 2020, and it's becoming more important to deliver positive experience right through to the last moment. User expectations are driving a number of important and pressing challenges that pharmaceutical brands need to address. They include how to get value from existing assets, how to play in the ecosystem with other business-to-business players, how to deliver an experience to establish connect with the patient.

Put simply, smart packaging is all about the end-user and enhancing their experience with a brand and product. Smart technology offers brands more avenues to stay connected to patients, to supply more information to patients and HCPs (Health Care Practitioners), and to keep them engaged with the brand. But it is simply a way of enhanced communication. If we think about regular product packaging, there's a finite amount of space available. Most is given over to key brand details and product information. This leaves little room to dedicate to content that deepens your end-users relationship with the brand.

This is a missed opportunity, given that product packaging garners some of the highest levels of end-user engagement. 71% of end-users want product packaging to provide information that's honest and transparent, so extending the amount of available space is the key to fostering brand trust.

Digital interface opens various opportunities for brands, for example:

- Dynamic information sharing: Smart technology can increase patient engagement by offering a wealth of user content. Customize information for smaller groups per their language, cultural or social setup.
- Multimedia sharing: If a picture is worth a thousand words, imagine the worth of a video! Providing instructions of use, end of life or reuse instructions through videos has higher recall and retainability in a user's mind.

Product integrity

Smart packaging is a game-changer in product integrity. Instead of a product being scanned at each checkpoint, the packaging becomes the source of the data. Intelligent applications can extend shelf life, improve safety, and optimize communication. Simplified inspections, for example, with a NFC data logger that monitors temperature and freshness during transport, can increase the product quality, reduce waste, and improve safety allowing producers to save tremendous time and costs. Additionally, brands have access to real-time data at any time, from any place and reducing any risk of losing the product.

In pharmaceutical industry drug products need to be transported and delivered under strict environmental conditions and even though providers make use of data loggers, this kind of information cannot be available in real-time. Smart packages can monitor the condition of a product and notify whether it is good or compromised using advanced indicators and sensors, offering providers easy access to quality control.

Sustainability

As sustainability has become integral to packaging it is necessary that smart packaging designs do align with this trend. In many ways, useful application of smart packaging is helping the environment. With smart technology able to detect whether certain drugs are still safe to use, it could extend the shelf life of a product, reducing drug waste and providing greater efficiency in the supply chain.

Not only that, embedded information could also provide the patient with detailed information about how the packaging can be recycled and even directions to the nearest recycling center.

Packaging is much more than just protecting the product or displaying static informationit's an opportunity to create interactive experiences then enhance product quality and grow brand rapport. As competition in the industry heats up after the pandemic, it's safe to say that the winners are going to be those who take advantage of emerging technologies to give themselves an edge in a saturated market.

*Shruti Parikh is the Packaging Design Lead of Takeda Pharmaceuticals (www.takeda.com) based out of Massachusetts, USA, steering Packaging Design, Sustainable Design and Patient Engagement Interaction Design capabilities globally. Shruti's innovation in packaging comes through the establishment of human factors processes and by employing user-centered design principles and practices. This approach, in collaboration with stakeholders, contributes to the creation of value adding solutions and services that mitigate product misuse, reduce user variability, and enable better user experiences.



For more information on this issue, visit:

- 6 Packaging Trends to Look For https://brands.esko.com/top-packaging-trends/
- Blulog (Poland) uses NFC-enabled data loggers and NFC-connected boxes.
 https://nfc-forum.org/resources/blulog-keeping-foods-fresh-throughout-cold-chain/
- The Future of Smart Packaging https://www.simon-kucher.com/en-us/blog/future-smart-packaging

News from Corporate Partner

'Rethinking plastics', a video that you should watch!



Recently WPO Corporate Partner, BioLogiQ (www.biologiq.com), launched a video in Linked In - https://lnkd.in/dPkEDBYb – that invite the audience to 'rethinking plastics'.

The video proposes clear priorities for more eco-friendly plastics:

- (1) plastics should be made from plastics... with a minor portion being made from renewable feedstocks (mostly to make up for recycling losses);
- (2) plastics should incorporate a "safety mechanism" compatible with nature's biodegradation systems in the event they escape recycling and waste management infrastructures.

While that perfect plastic is yet to be invented, BioLogiQ presents NuPlastiQ as a "sustainability upgrade" to mainstream PE, PP and PS and bringing them one step closer to that vision: durable (no accelerated fragmentation), recyclable and yet more biodegradable, and the most important: available today.

The video also displays, in-depth, recyclability studies demonstrating that, like paper, it is possible to aspire to have more biodegradable plastics without disrupting recycling. It also shows some recyclability studies and its results.

BioLogiQ also believes in a communication program that will enable brands to:

- (a) tell consumers they are utilizing an innovative plant based plastic (with a label) packaging level;
- (b) explain that the innovative plant-based plastic has demonstrated potential for reduced environmental pollution while remaining durable for most uses, making it clear that increased biodegradation does NOT mean a license to litter. Top priorities continue to be the 3Rs and improved infrastructure. (partner website).

BioLogiQ is by no means claiming that NuPlastiQ makes PE/PP/PS "perfect", but it is a significant step forward. Most importantly: it spearheads the vision of durable + recyclable + more biodegradable plastics.

For more information about BioLogiQ and its products, contact Bruno Pereira, Chief Sustainability Officer, by e-mail bruno.pereira@biologiq.com.

News from Corporate Partner

Know more about Trayak and the EcoImpact-COMPASS, a life cycle assessment tool for products and packaging

The new WPO Corporate Partner, Trayak (www.Trayak.com) is a software solutions and consulting company headquartered in the United States. It provides the leading life cycle assessment (LCA) tool for products and packaging, EcoImpact-COMPASS, to a broad range of clients as they embark on their sustainability journeys.

Trayak mission is defined as "to equip our customers with easy-to-use tools that can be embedded comfortably into their mainstream development, manufacturing, and launch processes". And the vision is that all companies will design and manufacture their portfolios using sustainable strategies and data-driven analysis.



The name Trayak is loosely defined from Sanskrit as 'The Protector' and this concept is what motivates the commitment to apply LCA, goal-setting, and cutting-edge design strategies directly into the workflow of manufacturers and brands across the world. "We strive to protect the earth by empowering our clients to integrate sustainability into the entire life cycle of their products and packaging from cradle to grave - through design, materials, manufacturing, transportation, use, and disposal", states the company.

This is achieved with tools and expertise to reduce the environmental impact of companies, pursue stronger sustainability goals, and better understand the operational tradeoffs that come with design change using the unique add-on module, SCORE.

Trayak flagship LCA tool, EcoImpact-COMPASS, was initially developed by the Sustainable Packaging Coalition (SPC) in a collaborative process with packaging experts, stakeholders, life cycle assessment professionals, and academia. The life cycle assessment tool sets the industry standard and is endorsed by organizations such as the Australian Packaging Covenant Organisation, Packaging Europe, and Walmart's Project Gigaton.

EcoImpact-COMPASS is now fully owned and operated by Trayak and is a powerful yet user-friendly tool with improvements such as:

- new datasets with specialized packaging materials and conversion processes;
- integrations into CAD, PLM, ERP, and Spec Management Systems;
- SCORE module to visualize operational requirements;
- cloud-based software requires no downloads;
- dashboard analytics and simple indicators for easy reporting.

The company's goal is to show that implementing sustainable practices, into a current manufacturing and design process, is not as difficult as it may seem. Trayak also strives to innovate in the field of life cycle assessment and product and packaging design while being attentive of the global context.

For more information, contact Nathan Mckee, Sustainability Analyst, by e-mail nathan.mckee@trayak.com.

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