



WPONEWS

The packaging community around the world

Better quality of life, through better packaging, for more people

President's Word

We definitely can reduce food loss through suitable packaging!

Pierre Pienaar*

These past few months I have been involved in training forums focussing particularly on the importance of packaging in the cold supply chain. A rather focussed element of packaging but a very important one if one considers that amount of food wasted across the globe.

In a typical supply chain management workflow, product packaging safeguards the finished products as they move across the entire process, especially during transport to retailers and the destination. In a cold supply chain environment, this is much more important as one now deals with temperature control across different modes of transport, across different countries and across different geographical zones of the world.



Each of these criteria needs to be considered when designing the packaging. To make matters more challenging is that the human population is set to reach 10 billion by 2050, whilst more than half of the world's population is expected to rely on food sourced from other countries by the year 2050.

Therefore, to meet this need, focussed and significant development of cold chain technology will be required as food security continues to be a significant problem in poverty-stricken countries. Ways of meeting these challenges with solutions is to prioritise cold chain technology as a way of improving food storage methods, but in addition is to improve the packaging thereof.

Approximately 35% of food produced is either lost or wasted across the world and it has been shown that 25% of this lost/wasted food can be prevented by more suited packaging or better designed and improved packaging. To do this we need more suitably trained and educated packaging engineers and technologists across the global packaging landscape.

From an economic development perspective, the cold chain enables many developing economies to take part in the global perishable products market either as producers or as consumers. Too often does the WPO training team experience shortcomings in suitable application of the science and technology of packaging where through more packaging education, these issues could be avoided and, in many cases, provide enhanced shelf life to products.

In the cold supply chain this knowledge is even more important as cold chain technologies enables providers to keep food fresh over long transit journeys, or store produce over long periods for out-of-season sales. The challenge remains in getting chilled product from the point of processing to the consumers often thousands of kilometres away. An integrity breach to temperature range can deem the food product unsafe, resulting in food waste and lower profit margins for manufacturers.






Miguel Campos, Export Sales Manager of Advanta, says that packaging material can make or break the cold chain, yet packaging is rarely discussed as a crucial cold chain factor. As the

food's first point of contact, proper packaging is essential when attempting to maintain product integrity throughout the cold chain process.

We, in the WPO, say that this waste is avoidable through education, and we can provide the necessary education. Over the past 9 years, more than 2500 people have attended WPO training programs across the globe. This is a drop in the ocean when it comes to the need. The WPO is in the process of implementing a revised training strategy to double the training offers across the world from 2023.

Anyone needing specific packaging technology training is to visit the website www.worldpackaging.org or write to info@worldpackaging.org.

***Pierre Pienaar is President of WPO**

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 [World Packaging Organization](https://www.youtube.com/channel/UC...)

From the Editor

Digitalization of processes and packaging: welcome to the era of 'market time'!

By Liliam Benzi*

A survey recently released by NCI (National Confederation of Industry - www.portaldaindustria.com.br/cni/) with over 1,000 companies revealed that the Brazilian industry is more digital than five years ago. If in 2016, less than half (48%) of the companies surveyed used digital technologies, in 2021 this percentage rose to 69%.

However, the bottleneck still lies in the little variety of technologies employed, which indicates that the digitalization process is still in its early stages. So much so that the survey revealed that 26% of respondents use one to three of the 18 technologies listed, and only 7% have adopted 10 or more of them. For 37% of the companies, the lack of qualified professionals is an external barrier to the adoption of digital technologies.

And the question arises: how to make the transition from a reactive to a proactive environment, especially as in the case of packaging industries, a B2B business? Although much is said about the Industry 4.0 journey, few seem to be clear on where to start.

One thing is certain, the digitalization of processes is inevitable, just as the digitalization of packaging itself is inevitable. The consumer is digital and will not go back. Therefore, it will be up to the industry to adapt to this demand.

Recently, a major multinational in the marking and coding industry, Videojet (www.videojet.com), offered an important food client in Chile an exclusive morning of content that addressed just that: the connectivity of packaging in order to make it active and intelligent.

According to the specialist in augmented reality and interactive packaging, Henry Assef, not only industries, but also brands need technology to draw people's attention at the PDVs and transmit information. And this retention of information is 70% greater with the use of technologies that 'talk' to the consumer.

On the other hand, these technologies allow brand owners to monitor consumer habits, correcting possible problems, delivering solutions in less time and, mainly, predicting new consumption habits. It is technology transforming packaging into an active experience for and with the consumer.

But back to the manufacturing universe, how do we begin the digital journey? Perhaps the first step is by detecting problems. According to experts, using AI (artificial intelligence) for this purpose is relatively simple. The system captures data, either via sensors or images, and



can visualize the performance of the assets. Once trust is established with the system, it becomes easier to use machine learning and AI technology to keep the assets running smoothly on the shop floor and to think of new digital applications. In other words, the process is one of continuous evolution.

And as AI evolves and companies intelligently manage their assets, they seek so-called 'Zero D': zero defects and zero downtime. The concept does not decouple defects and downtime and does not recommend a separate approach. This is because both points are critical and the industry only achieves true transformation when it 'tackles' them together.






It doesn't matter how high production is if there is downtime; the company will not meet the demands. And the reverse is also true: an industry that is very efficient in its manufacturing processes, but has a poor quality inspection system, will increase rework.

What is important in this process is that the company is aware of its issues and is open - and culturally prepared - for the digital journey. Not incorporating digital technology into your processes and packaging is no longer an option.

Everything needs to be monitored, especially at a time when the packaging industry is no longer driven by macro-trends, but by micro-trends. These are increasingly distributed and diverse movements that depend on technology to be transformed into connected processes, products and packaging that make sense for the market, for society and for the environment. Welcome to the era of 'market time'!



***Liliam Benzi** is WPO Press & Communication Liaison Officer and runs its own Communication & Strategy company for the packaging industry, LDB Comunicação Empresarial.

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 Liliam Benzi

Message from General Secretary

Crazy – but very happy – days!



Dear WPO friends! Sorry, but I have to make it short – it's very busy at the moment. Have you recognized, what is going on in the last weeks and days? It's just amazing! Just to mention a few (and I'm sure, I will miss half of activities and just can hope, nobody is upset):

- Nerida and Liliam have been running a media campaign for International Day of Awareness of Food Loss and Waste (29 September) while Joseph from Kenya reports outstanding actions about exactly that issue in Africa.
- Kishan is holding a series of trainings in Pakistan organized by our WPO member FLEXPAC (thanks, Saad!) while we are just closing our apple packaging project in cooperation with UNIDO there.
- Pierre traveled to Lebanon doing trainings there and meeting Soha and her team as they are in the middle of WorldStar applications.
- Bill, in South Africa, is working on improvements of the WorldStar student program as more and more entries make the need of a new effective judging system.
- Ukraine is celebrating their 150th issue of packaging magazine "Upakovka" produced under hardest conditions as you can imagine.

- Iva, from Syba, and me just represented WPO and EPIC at "Fachpack" – Europe's biggest trade show for packaging materials and machines.
- Luciana and Shira, from Israel, organized a well-received WPO webinar on packaging as a marketing tool.
- And last but not least, when you are reading this, many of you will just meet in Tokyo for the WPO Board Meetings.

Crazy, right?? But this is WPO and how I love it. This is what we should be: active on working for better quality of life through better packaging for more people. To tell you something, I am proud of WPO and all its members!

As mentioned, at the moment we are in Tokyo (or at least traveling there) doing our meeting. Cannot report on what happened in detail there – but what I know already is that Hiroko and her team from JPI have done a great job to prepare everything in uncertain times. I guess every packaging related person knows/feels how exciting a trip to Japan is for all of us. It is not just a funny incident that WPO was founded there.

Preparations of meetings never stops and we are in the middle of organizing meetings with Messe Düsseldorf already. Hard facts: WPO will have a meeting area there for the whole Interpack show (4.-10-5-2023). Our meetings will be WPO Executive Team on Fri 5.5.2023, WPO Working Groups and WorldStar Ceremony on Sat 6.5.2023 and finally WPO Board Meeting on Sun 7.5.2023.

One quick reminder before I close: please don't forget, that WPO has a new address:

**Canovagasse 7/1/14
1010 Wien
Austria**

So if you are sending us correspondence by post and especially invoices, please update our address data.

See you in Tokyo!

Nathália Antoniazzi

WPO Secretariat

info@worldpackaging.org

Johannes Bergmair

WPO General Secretary

j.bergmair@worldpackaging.org

Around the World

Packaging education and packaging award in Nigeria



Ahmed Alex Omah, President of African Packaging Organisation (APO), a WPO member, participated on the first graduation ceremony of Nigeria Packaging Academy. The Diploma and Certificate courses and the unveiling of NaijaStar Awards represent the packaging excellence in Nigeria's packaging industry.

Also present at the ceremony, Basil Agboarumi, MD/CEO, SAHCO Plc; Tunde Obokhai, MD/CEO, DCS Integrated Media Limited; Dariah Pfaff, Project Manager, Fairtrade, Organiser of Agrofood and Plastprintpack Nigeria.

You can access the photos from Graduation and from Naijastar Awards at:

- <https://drive.google.com/drive/folders/1tal4oSaaJc7Bpm6pT5-7YLtgKBhutW4r?usp=sharing>
- <https://www.thisdaylive.com/index.php/2022/03/25/nigeria-packaging-graduates-40-students-unveils-maiden-edition-of-naijastar-awards/>
- <https://youtu.be/4Oxiyejx6d8>

Sustainable packaging at the 3rd Havana Biennial Design

As of the 3rd Havana Biennial Design, the experience of design, food and sustainability "Living for Others", provided exquisite wisdom from the local context for the participants of the Project's Packaging Workshop. The event last 02 weeks at the René Portocarrero Serigraphy Workshop. The Conference sessions offered knowledge about international standards for packaging and the latest trends on nutrition issues.



ISDi students, in cooperation exercise

The CNEE (Cuban National Containers and Packaging Center), a WPO member, was at the event and two of its consultants, Lourdes González Llorit and Niurka García Roque, spoke at the Conference "Containers and Packaging, generalities".



Photos of award-winning packaging as part of the event

Based on the information of the Conference, students from the 2nd to the 4th years of the Higher Institute of Design, (ISDi), were challenged to create packages for 10 medium and small food companies according to the following briefing: to achieve the organic and transversal link of different disciplines, so that each one could be nurtured by the knowledge of the others.

For more information about packaging education activities in Cuba, contact Miriela Valle, Director of CNEE by e-mail miriela@cnee.cu.

150th number of the Ukrainian magazine 'Packaging'

In 1996, for the first time in Ukraine, the magazine "Packaging" was published and became the official information channel of the Association of Club Packagers of Ukraine, a WPO member. Over the years, 150 issues were published with more than 2,900 scientific, popular

science and informational articles on packaging. The authors: 1,050 specialists from 24 countries around the world.

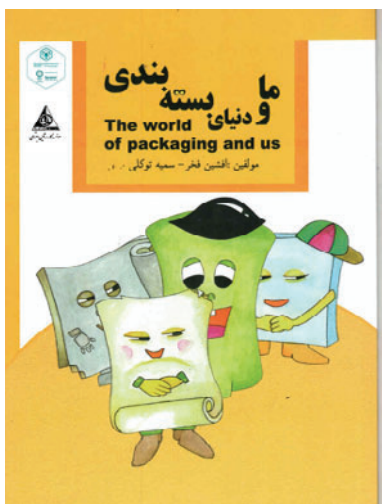
The magazine covered the visits of WPO Presidents to Ukraine: Sergio Haberfeld from Brazil (2002); Alexis Stasinopoulos from Greece (2005); and Keith Pearson from South Africa (2008). Each year, the magazine provided information on WPO meetings, the results of the WorldStar Award competition and other events related to the global packaging community.

Since the editorial office has moved to Poland, 05 editions were published. In these issues, you can read articles about the situation of Ukrainian packaging companies and the production of packaging for food and medicines for the Ukrainian population. To celebrate the 150th issue, the 'Packaging' magazine was published in Ukrainian and English.



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

'The World of Packaging and Us' is dedicated for children



WPO member in Iran, Iranian Institute of Packaging (IRIP – www.iripack.com) published a book 'The World of Packaging and Us', for children, in order to educate about the benefits of packaging for the business improvement, its role in the protection of products and also how to progress eco-friendly packaging. The goal is the development of packaging based on a life-cycle assessment concept.

The book introduces the history of packaging and teaches about the necessity of packaging and the materials used in this industry. It also shows that the choice of packaging material depends on the type of production, shape, volume, vulnerability, freshness, contamination of the goods.

Also, children will get to know the packaging industry including packaging elements, packaging design and environmental issues through step-by-step training. IRIP is already planning to publish more books like this to support training classes.

For more information, contact Afshin Fakhr, Executive Director of Iranian Institute of Packaging by e-mail irip.fakhr@gmail.com.

Important discussions in Ghana with UNIDO

The Executives of IOPG (Institute of Packaging Ghana – www.iopghana.org), a WPO member, met with a three members of the UNIDO (www.unido.org) delegation in Accra to discuss possible areas of cooperation between the two institutions and to strengthen the local packaging industry. The meeting was held at the Royal Crown Packaging Limited.

The UNIDO team briefed IOPG on past and current partnership projects with WPO and successful packaging centres established in Lebanon, Jordan, Cuba and other countries.

IOPG narrated its journey over the past 19 years, including the transition from the UNIDO supported Packaging Cluster to the actual model, the Packaging Training programmes and its role to establish the African Packaging Organisation (APO), also a WPO member.

The UNIDO team is in Ghana in connection with the recently launched project - 'Expanding the Kaizen initiative by enhancing sustainable agribusiness'. The project aims to support Ghanaian agro-processing MSMEs improving their enterprise performance.

Hungary launches the 'Global Packaging Design for Recycling Guide'

During its second international conference 'Packaging design for recycling', WPO member CSAOSZ (Hungarian Association of Packaging and Materials Handling - www.csaosz.hu) launched the translated version of the 'Global Packaging Design for Recycling Guide' prepared in collaboration with WPO, the ECR Community and the University of Applied Sciences in Vienna. The Hungarian version is available at WPO and CSAOSZ webpages <https://www.worldpackaging.org/wpo/45/> or <http://www.csaosz.hu/>.



The conference joined 11 speakers, including WPO Vice President Sustainability & Save Food, Nerida Kelton and Manfred Tacker, from University of Applied Sciences, Vienna. The presentations showed that both packaging material users and manufacturers identify the new and stricter environmental protection requirements.

Hungary is the 04th country to translate the Guide. All translations are available at WPO webpage.

From the Board

WPO President, Pierre Pienaar, is a new member of Packaging & Processing Hall of Fame 2022



During PACKEXPO International (www.packexpo.com – Oct 23-26), in Chicago (USA), WPO President, Pierre Pienaar, was inducted into the Hall of Fame Class of 2022. Since 1971, the Packaging & Processing Hall of Fame has recognized career packaging and processing professionals for their significant contributions to the industry and education. Besides Pierre, this year's honourees are Jean-Jacques Graffin, Rebecca Oesterle, and E. Jeffrey Rhodehamel.

As described by PMMI (The Association for Packaging and Processing Technologies), the Hall of Fame organizer, "Pierre Pienaar has become one of the most prolific and recognizable packaging educators in the world. President of the World

Packaging Organisation, his passion is educating the world about packaging, the science of packaging, and the need to properly recycle. In addition to running a packaging consultancy in Australia, Pienaar lectures students in Food Innovation and Packaging at universities around the world".

The Hall of Fame welcomes new members every other year. They are chosen by the Hall of Fame Commission, which selects inductees from individuals who have been nominated. The Commission includes a cross-section of industry professionals including suppliers, end users and journalists.

For more information visit www.packexpointernational.com.

WPO at Asia Green Packaging Innovation Summit

Nerida Kelton and Henky Wibawa, respectively WPO VP Sustainability & Save Food and VP Education, spoke at the Asia Green Packaging Innovation Summit hold on the 27 and 28 September.

The event focused on discussing the regulations and market trends of packaging sustainability in Asia, sharing the sustainable value chain of packaging, probing into the application of advanced materials, exploring sustainable packaging technology and printing technology.

Asia Green Packaging Innovation Summit 2022

September 27-28, 2022 Singapore

Background

Packaging waste management is no longer just a trend but a key strategic pillar for the industries in Asia. What are consumers in Asia concerned about green packaging? What unresolved challenges are we facing in packaging sustainability?

In this summit, we will discuss the regulations and market trends of packaging sustainability in Asia, share the sustainable value chain of packaging, probe into the application of advanced materials, explore sustainable packaging technology and printing technology, discuss how to promote the integration of industry and digital technology, drive the zero-carbon reform of packaging industry, so as to improve the implementation of sustainable development strategy, promote packaging R&D innovation and product differentiation, strengthen the packaging value chain and promote brand establishment and marketing of the enterprises.

Organizer

ECV

Presentation Sponsor

Exhibition Sponsor

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Speakers



Jovan Tan (Chairman)

Chief Executive

TRIA



Ying Stefan (Chairman)

Head of Corporate Development (Asia)

Plastic Energy



Partner

Reinold Berger



Executive Director

Indonesian Packaging Federation



Director, CPG and Sustainability for India and South West Asia region

Coca-Cola



Country Manager

Ball Bearings

Packaging Company Limited



Head of Sustainability

Packaging Department & Safety, Health, Environment Department

Nestle Indonesia



Packaging Development Engineer

Cargill



Vice President, Head - Plastic Applications (Asia)

TOMRA



APAC General Manager

TerraCycle



Vice President

Sustainability & Save Food

World Packaging Organisation (WPO)



Sustainable Transformation Practice Lead

Kantar



Packaging Development Specialist

PT. Histo Laboratories Indonesia



Ph.D., Global Sustainability Director, Packaging and Specialty Plastics

Dow



Packaging Development Associate Director

Belmont North East Asia



Senior Manager, Sustainability - APAC & SEA

Electrolux SEA

The Summit also aimed to improve the implementation of sustainable development strategy, promote packaging R&D innovation and product differentiation, strengthen the packaging value chain and promote brand establishment and marketing of the enterprise.

The hot topics were:

- Regulations for Minimizing and Managing Packaging Waste in Asia
- Sustainability in Packaging: Consumer Views in Emerging Asia
- Asia Flexible Packaging Market Performance in the Post-pandemic era and Prospects to 2025 and beyond
- A Life-cycle Approach to Sustainable Packaging
- Low Carbon Supply Chain for Packaging Sustainability
- How to Promote Renewable and Responsible Sourcing of Packaging

WPO represented at Fachpack 2022



Besides an institutional booth at Fachpack (27-29 Sept www.fachpack.de) WPO also participated in the official conference. Nerida Kelton, VP Sustainability & Save Food, and Ernst Krottendorfer, spoke on the event. Another WPO member present at the trade show was CENEM (Packaging Center in Chile – www.cenem.cl), represented by Marcelo Meneghello, its past President. WPO General Secretary, Johannes Bergmair, also participated at Fachpack.





The show is considered one of the main events in Europe for companies that produce and use packaging. It has been held in Nuremberg for over 40 years. It provides a compact, but comprehensive, insight into all relevant topics from the packaging industry that includes solutions for product packaging for industrial and consumer goods, packaging aids and packaging materials, but also for packaging production, packaging technology, logistics and packaging systems or printing.

WPO has a new address

Dear member, please be advised that WPO is now located at a new address.

Canovagasse, 7/1/14
1010 Wien
Austria

If you have any questions, please contact WPO Secretariat, Nathália Antoniazzi, by e-mail info@worldpackaging.org.

WPO conducts a video press conference at Tokyo Pack 2022

As part of its activities during Tokyo Pack 2022 (Oct 12-14 – www.tokyo-pack.jp) WPO showcased a video to the local press with the main messages and goals of its President, Pierre Pienaar. According to him, WPO aims:

- to encourage the development of packaging technology, science, and engineering;
- to contribute to the development of international trade;
- to stimulate education and training in packaging;
- to support local industries and professionals create their own packaging organizations;
- to promote the exchange of technologies.

Pierre's objective is to focus in leading the WPO and ensuring that it continues supporting the International Save Food Project, an initiative of the UN's Food & Agriculture Organisation, in different ways. He also concludes that the packaging industry is at the crossroads and that the future of packaging depends on the industry's professionals. According to him, the decisions that can path the future for next generations are:

- The **material types** has and will change the landscape having a direct impact on sustainability.
- The **technology** will map the course of energy reduction that we will follow over the next 10 to 20 years.
- The **innovation of ideas** in packaging will make the difference to create a successful and sustainable circular economy
- The **people** that use the packaging, the demands placed on the industry, along with knowledge and the necessary education, will make the difference for a successful future.

Summarizing, Pierre believes in "empowering consumers with the ability to lead their lives in a more environmentally positive way Educating, Equipping and Empowering the next generations".

Important information about the 2023 edition



After concluding the remarkable WorldStar Award ceremony, that was held in Milan during IpackIma show (04 May 2022), with the participation of more than 300 packaging professionals from 37 countries, WPO opened the entries for WorldStar 2023 on June 15; it closes on October 20, 2022.

The 2022 edition hit a record with 440 entries from 37 countries. The 2023 edition is expected to be even more special. WPO is introducing two new main Categories - Gift Packaging and Digital Packaging - and one new Special Category - Accessible Packaging.

According to WPO Senior Vice President, Luciana Pellegrino, "The WorldStar Packaging Awards echoes the importance of packaging innovation on a global level, fostering science, technology and innovation, recognizing and encouraging packaging professionals to go beyond and engaging brands, packaging companies and design offices for greater possibilities."

Packages eligible for WorldStar Awards are those that have already received a national or regional packaging award from a packaging competition that is recognized by WPO, during the last 2 years. The aim is to promote packaging innovation in various sectors, proving that a good package can be an essential solution to many of the modern problems, especially sustainability, food waste and extending shelf life of food and agricultural products.

The schedule for the 2023 edition of WorldStar Packaging Awards is the following:

- 15 June 2022 Opening for entries
- 20 October 2022 Closing date for entries
- November 2022 Judging process
- 09 January 2023 Announcements of winners.
- May 2023 Awards Ceremony and Gala Evening during interpack in Düsseldorf (Germany)

For general enquiries on WorldStar Awards contact the Coordinator and WPO VP Events, Soha Atallah, by e-mail s.atallah@worldpackaging.org or visit www.worldstar.org.

Education

Packaging education in Pakistan

The 03 days WPO packaging training course, in 03 different locations in Pakistan, was a total success. Participants could learn from the trainer, Kishan Singh, WPO Global Ambassador, about different subjects, including sustainability, EPR systems and legislation on circular economy.

The occasion was also suitable to discuss design for recycling with focus on starting up a national packaging award. In total there were almost 100 senior level participants in the program organized by WPO local member Flexpack (www.flexpackpk.com).

For more information about WPO Education programs visit www.worldpackaging.org or contact WPO VP Education, Henky Wibawa, by e-mail henkywibawa@worldpackaging.org.





New packaging training course in Lebanon

Another successful WPO packaging training program took place in Lebanon and was delivered by WPO President, Pierre Pienaar. Organized by WPO local member, LibanPack (www.libanpack.org), the training explored trends in packaging technology and in packaging materials, giving the participants, most of them from local food companies, a valuable opportunity to interact through an intense networking.

It also counted with the presence of WPO VP Events and WorldStar Coordinator, Soha Atallah, that is LibanPack Executive Director.

For more information about WPO Education programs visit www.worldpackaging.org or contact WPO VP Education, Henky Wibawa, by e-mail henkywibaxa@worldpackaging.org.







Cuba incentives packaging education

WPO member CNEE (Cuba National Packaging Center) organized the training course 'Containers and Packaging. Updating' focused on companies that produce and consume packaging. For 02 days, the 27 participants learned about design, packaging and packaging marketing, container-product environment interaction, current technologies, sustainability and recycling.

Trainers were the specialists Manuel Viñals (Controlpack System S.L); Yamilet Pino (National Office of Industrial Design); Mario León (Mipyme PMS Cuba); Soledad Bolumen (Food Industry Research Institute - IIIA); and Niurka García and Lourdes González (CNEE).

For more information about packaging education activities in Cuba, contact Miriela Valle, Director of CNEE, by e-mail miriela@mindijs.gob.cu.

Country Report

Significant activities of Packaging Association of Latvia

After several years of quiet period in the informatively educational activities of the packaging industry in Latvia, certain elevation is seen this fall. At the beginning of September, the international food and packaging industry fair 'Riga Food 2022' was held. Not only packaging companies from Latvia, but also closest neighboring countries participated there.

Within the exhibition, the Packaging Association of Latvia, a WPO member, exhibited the works submitted to the national packaging competition 'Latvia Star 2022'. During the exhibition, Chairwoman of the Board of the Packaging Association of Latvia, Iveta Krauja, participated in the international conference 'Innovative and Sustainable Solutions in Food and Packaging'.

The conference was organized by Latvian Technology Center in cooperation with Latvia University of Life Sciences and Technologies (LLU). I. Krauja together with Dr.sc.ing., Sandra Muizniece-Brasava, Assoc.Prof. of Faculty of Food Technology, Head of Technology and Knowledge Transfer Office at LLU and other professionals took part in the panel discussion – 'Challenges in Packaging Industry Today'.



Also in September, Iveta was interviewed by the national TV 1st Chanell in the program 'Environmental facts'. She gave her opinion on packaging trends in Latvia and talked about 'green packaging', which is not packaging in green color, but packaging where every detail is really necessary. Therefore it is the product manufacturer's task to use most reasonable packaging for their products.



Next significant event in the informatively educational program was held at the end of September, when Latvian Packaging Certification Center organized an annual conference about 'Novelties in Regulatory Acts on Packaging and Natural Resources Tax' for the local natural resources tax specialists. Beside the analyses of regulatory acts national, Packaging Competition Project Manager, Nadina Neimane-Gardovica, gave a special presentation on 'Goals and Achievements of National Packaging Competition'.

At the beginning of November Packaging Association of Latvia plans to take part in the international fair 'Furniture & Design Isle 2022', held in Riga. Association will participate in the discussion organized by the Latvian Designers' Society about 'Packaging and Design Collaboration', together with the leading design specialists. Moreover, during the fair, the Association will hold a special exhibition 'Latvia Star Winners - WorldStar Winners'.

For more information about Packaging Association of Latvia activities visit www.packaging.lv or contact by e-mail packaging@packaging.lv.

Sustainability

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.



Why is it important to reduce food loss and waste? One third 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 was a country, it would be the third largest GHG emitter behind the USA and China.

According to WPO President, Pierre Pienaar, "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."

Vice President Sustainability & Save Food, Nerida Kelton, adds: "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."

"The most innovative and intuitive Save Food Packaging uses design features that can contain and 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," she said.

The WPO has been working on the issue of Food Waste and the role that packaging plays for many years now and has developed a special award category for innovative and intuitive Save Food Packaging Design in the annual WorldStar Packaging Awards, its global packaging competition (www.worldstar.org).

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. It also 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. WPO encourages all businesses to consider entering this award category to help showcase Best Practice Save Food Packaging Design across the globe.

How can WPO Members get involved in the 'International Day of Awareness of Food Loss and Waste'?

- Take advantage of this important opportunity to call for action. Run a webinar discussing the Food Waste and Loss challenges and programs in your region or country.
- Engage with your industry media discussing the issue in your region or country
- Recognise local Food Waste Champions and thank them for their work
- Recognise local charities and associations who are helping to minimise food waste in your region or country
- Showcase the good work that is being done in your region or country regarding Food Waste
- Support your local Foodbank by asking your members to donate canned non-perishable goods
- Showcase local companies who have developed innovative and intuitive Save Food Packaging designs
- Encourage your food and beverage manufacturers to donate goods to Foodbanks and Food recovery services
- Establish an annual industry event to pack hampers for those in need

- Let the WPO know what your association is working on in the area of Food Waste and Save Food Packaging
- Leave your own video message about Food Loss and Waste on your social media platforms and tag in.

Special Article

Intelligence in packaging can minimise food waste

By Nerida Kelton*

Food Loss & Waste statistics in Australia are simply staggering. 7.6 million tonnes of food are wasted across the supply and consumption chain each year, costing the economy \$36.6 billion. This waste equates to 312kg per person, one in 5 bags of groceries, or between \$2000 and \$2500 a year that is dumped in the bin and ending up in landfill.

With the issues covering all parts of the value chain from paddock to plate everyone needs to play a role. There are many ways that Food and Beverage Manufacturers can play a role, but one way is through the packaging they design and use.

Packaging has always played a critical role in containing, protecting, preserving and transporting a product from point of production to the household. But now, more than ever it needs to ensure health and safety, extension of shelf life, tamper evidence, traceability, recall capabilities, temperature monitoring and the ability to minimise food loss and waste wherever possible across the value chain.

The good news is that we are starting to see more packaging that is intelligent, intuitive, accessible, inclusive, sustainable and offering lower environmental impacts.

So many of the winners in the 2022 Australasian Packaging Innovation & Design (PIDA) Award have designed packaging that can provide significant benefits to minimise food loss and waste from paddock to plate. It is extremely encouraging to see that Save Food Packaging is increasingly on a packaging technologists radar and that Food and Beverage Manufacturers are now designing packaging that can save food.

Thermochromic dye technology, temperature monitoring systems for food and beverage, 2D Barcodes for meat, traceability systems for exported premium grapes, accessible & inclusive ready meals for chicken and dunnage for exporting meat [are just some of the new Save Food Packaging designs that stood out at the 2022 PIDA Awards.](#)

ThermoShield temperature monitoring system

ThermoShield, developed by Caps and Closures, is an optical system, meaning the packaging will dynamically change its colour appearance at a pre-selected temperature switching point. Based on thermochromic dye technology that changes colour as the environment changes, the system allows for more than two colour changes (e.g., black to orange to red) as the packaging gets warmer, and the reverse as the temperature drops through the selected switch temperatures. The design can also allow for 'locking' of the colour when the temperature rises above a set temperature, changing colour permanently.



This feature finds application where a particular temperature renders the contents unusable. This can be especially useful in tracking cold chain (refrigeration required), perishable food or beverage, to extend display and home refrigerator shelf life, which ultimately reduces food waste. ThermoShield is useful in transport and warehousing because the over-temperature stock can clearly be seen.

ThermoShield ensures that the packaging can alert logistics managers, warehouse staff and consumers to instances where temperature sensitive products are being, or have been, exposed to higher or lower than acceptable temperatures.

Traceability of any product is enhanced when temperature excursions are detected, and the level of resolution can be macro (container temperature), down to discrete (the individual product) packaging. Using the locking function available, a record of overheating is permanent and will be identified after a long road or sea shipment.

Stock can easily be sorted to remove damaged product prior to warehousing or stocking shelves. This innovative technology has the potential to significantly reduce food loss and waste due to incorrect temperature control at various stages of the logistics path from paddock to plate.

Inghams Waitoa free range butterflied chicken

The community of farmers behind the Waitoa brand are at the forefront of free range, Toitū Carbonzero™ certified chicken farming in New Zealand. Here, respect for nature comes naturally and sustainability drives decisions.

The Inghams Waitoa Free Range Butterflied Chicken is a pre-marinated product that transforms the consumer experience and eliminates the need for consumers to handle raw chicken and marinate themselves, which can often be a source of food waste. The pre-marinated range comes with an easy open tear notch, a user-friendly cooking experience and the ability to freeze the product. These features mitigate waste in households which accounts for approximately 50% of all food waste.

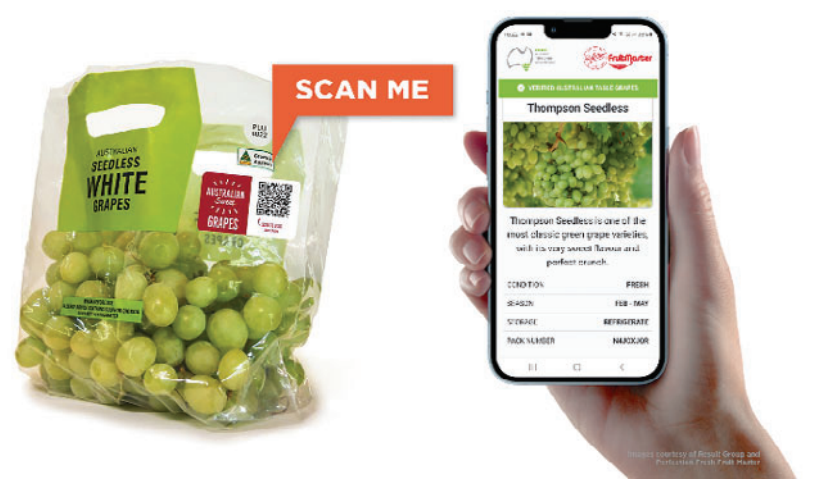
Additional Consumer engagement and information is included on the pack via instructions for storage and cooking, a callout that the chicken can be frozen and scannable QR code accesses meal inspiration ideas.

The packaging has been developed in partnership with Sealed Air NZ using CRYOVAC technology that increases shelf life by 40% to 14 days. The packaging incorporates 80% recycled content and is Australasian Recycling Label (ARL) return to store recyclable.

ATGA Table Grapes project

To address the need for greater transparency within the industry, the Australian Table Grape Association (ATGA) worked with Result Group and Perfection Fresh to launch a new traceability system for export table grapes.

Since grapes are highly sensitive to impact due to their relatively thin skins, they must be handled with appropriate care. High temperatures and low humidity cause water loss from the grapes and stems, which ultimately increases the rate of deterioration which in turn reduces shelf life.



Maintaining the cold chain with proper cooling, storage and monitoring can extend the shelf-life of grapes and ensures minimal product waste. In addition, active packaging was developed that comprises of releasing/emitting properties to inhibit spoilage caused by microbes. The packaging not only protects the table grapes but also extends shelf-life.

Each pack has a unique identifier QR code that provides a convenient and actionable way for consumers to access real-time information about the product. The code can be scanned by a smartphone and provide information about the product's origin. The applied unique serialised GS1 Digital Link-enabled QR code allows the automated collection of data from paddock to plate. The Active Digital Identity (ADI) embedded in the QR code label ensures each item is unique and traceable; an important innovation in combatting food fraud. Each label carries critical international traceability data, based on GS1 standards, covering consumer pack units, cases and pallet codes, as well as time and temperature logging, which are captured

through the EVERYTHING Product Cloud database. Using GS1 standards future proofs the table grape industry for evolving traceability regulations in export countries.

Real-time temperature sensors are placed in all cartons and shipping containers for temperature monitoring. With a temperature monitoring system, Perfection Fresh can easily track, control, and regulate a products temperature in a specific environment. The sensors log temperature levels at every step of the way during transport from farm to overseas retail outlet and alert the brand owner whenever temperatures are registered outside pre-set levels. During the shipping process quick action can occur to correct temperature levels and avoid product waste. The set-up alerts included temperature, humidity and location.

Traceability is at the heart of the ATGA Table Grapes project which effectively manages product beyond the loading process, enhances tracking of produce through the supply chain and takes the consumer along the journey with the brand.

JBS & opal dunnage for exported meat

Chilled meat products are typically vacuum-sealed and placed in boxes that are stacked in export shipping containers. Without the necessary dunnage support, these boxes frequently move in the containers during transportation and can lead to product spoilage and food waste, which is costly for meat and food processors. Whilst current solutions in the market are designed to limit box movement, they tend to be constructed from Expanded Polystyrene (EPS) material, which is not ideal from a sustainability and recyclability perspective at point of destination.

The JBS & Opal Dunnage replacement solution is a column-like corrugated structure to limit product movement during container transportation of meat exports and offers a direct replacement for the non-recyclable EPS version. The JBS dunnage solution is made using corrugated cardboard that consists of 64% Kraft paper and 36% recycled cardboard content and is fully recyclable. JBS export customers can easily recycle with the rest of their used cardboard packaging. The cardboard dunnage can also be assembled at JBS in less than 30 seconds from a flat sheet.

2DBarcode labelling in Woolworths meat range

Woolworths are the first Australian Retailer to invest in 2DBarcode labelling and with 20 million customers shopping every week the technology can offer significant efficiencies that minimise food waste.

The 2DBarcodes are currently applied to 50% of the Woolworths meat range in over 1000 stores across the country and the program has seen a 40% waste reduction in this category.

Having the Best Before Date in the 2DBarcode enables store teams to easily and quickly be able to identify if a product is approaching its expiry date and mark it down, so that the product can be sold without having to be disposed of. The technology also allows for more targeted and accurate product recalls, saving food from unnecessarily being sent to landfill.

2DBarcodes provide operational benefits in the areas of quality assurance and traceability, by encoding information such as confirmation of production time, the line food was produced on, the carton number the food was assigned to, the pallet number and inventory location of the food and when the food was shipped.

The encoding of a product's batch, lot and/or serial number into a 2DBarcode can assist in identifying any products that need to be recalled or withdrawn from shelf. The beauty of the 2DBarcode is that it can quickly and easily track and trace the items anywhere within the value chain. This benefit ensures that any unaffected products can be saved from the recall and remain on shelf for sale.

Since implementing the program Woolworths has seen improved date code management so food can be sold without having to be disposed, a 44% improvement in Out of Code Dumps and Stock Adjustment and a 21% improvement in productivity.

Whilst all of the Save Food Packaging innovations mentioned are designed differently, they offer commonality in intuitiveness, intelligence and outcomes that can potentially minimise food loss and waste across the value chain. The environmental benefits of designing Save Food Packaging can be significant and measurable, and we encourage all Food and Beverage manufacturers to consider what changes they can make to their packaging at the start to ultimately reduce food loss and waste across the value chain. Every design change can make a difference.

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