President’s Word

The future of packaging is in our hands!

Pierre Pienaar*

I recently attended the First World Packaging Design and Technology Conference in Hangzhou, China, where all the presentations involved primarily the following:

- new packaging materials
- new technologies in the packaging industry
- new design in the packaging space

I shared with the delegates present that I believe we, in the packaging industry, are at the crossroads, where the future of packaging is in our hands, where decisions need to be made.

The decisions that we make will alter the course and map the path for future generations. The material types that we use has and will change the landscape having a direct impact on sustainability. The technology that we design, and implement will map the course of energy reduction that we will follow over the next 10 to 20 years. The innovation of new ideas in packaging will make the difference to create a successful and sustainable circular economy.

Then, of course, the people, you and I, that use the packaging, the demands that we place on the industry along with knowledge and the necessary education, will make the difference for a successful future. We are here to integrate global innovation to empower packaging for the future!
Recently, I attended PackExpo and had the opportunity of addressing the media on what I need to remind readers that in Rio de Janeiro, where I took office back in November 2017, I set certain objectives as the incoming President, may I remind you thereof:

• **Reduction of food waste** through the better use of packaging and awareness thereof. Included in this is education, which is happening as we continue to build on activities that are already taking place within World Packaging Organisation (WPO).

Over the past four years, WPO has brought packaging technology education to more than 1,800 people involving 38 countries through 47 training programmes around the world. During the coming months, more countries will join the training list, including Palestine, Morocco and Egypt.

WPO also promotes and organises industry and student packaging competitions on a global basis, as epitomised by the WorldStar Awards and Student WorldStar. These global awards programmes recognise the expertise and genius of packaging companies and students. It is amazing to see how packaging projects can help avoid food waste and guarantee better quality food for more people.

• **Reduction in poverty** by the use of better and more effective packaging but focussing on correct use of packaging. Before we consider concepts such as packaging design and materials, innovation, technological advancements, environmental responsibility and sustainability, we must appreciate where the packaging industry fits into the chain that could deliver food to people who need it most. The WPO will also continue supporting the Save Food project, an initiative of Messe Düsseldorf (interpack organiser) and the UN’s Food & Agriculture Organisation. Again, we are talking about packaging education. Through WPO members, we aim to educate packaging professionals and society about the invaluable aspects of packaging: the fact that good and cost-effective packaging contributes to creating a more sustainable society.

This is very exciting, which means that with UNIDO’s support, will develop and implement specialised training and capacity-building programmes, and help to establish national packaging centres in developing countries to provide services such as packaging design and training courses.

• **Enhance WPO global image** by spreading the need for such an organisation in countries that currently are not involved. I have already put measures in place to achieve this and we are already seeing value from the efforts over these past 4 months.

The extensive travels around the world since being involved in the WPO is what drives me and certainly has taught me so much about packaging ideas, innovation, what packaging can do to help save food and in so doing reduce poverty. I have seen such interesting ideas from islands in the Pacific Ocean, across the globe to new ideas that makes life easier in Nairobi, Kenya.

We cannot ignore the fact that some countries face extreme inequalities of income between professionals and the masses, resulting in low GDPs. With this in mind, we need to contemplate how to reduce food wastage through better packaging.

During my global travels, the areas that I continue to focus on and ensure that I am interfacing and liaising with are:

- Academia / universities to evaluate the academic level of the WPO courses against world standards and at the same time encourage academia to promote reducing food wastage through improved packaging thus assisting in reducing poverty.
- Research Institutes to evaluate and assess where these institutions can help in packaging evaluation to also promote reducing food wastage through improved packaging thus assisting in reducing poverty.
- Packaging exhibition and conference organisers in South America to encourage them to promote the idea of Save Food at all their conferences and packaging exhibitions across South America.
- Hold media press interviews pushing my presidential objectives.
we as WPO is doing about the plastic issue. My message remains the same as when I stated it in Rio de Janeiro when I took office: “If no food was wasted, no one in the world would go hungry.” Having the correct packaging aligns with food safety. “Emerging countries are not using proper packaging, so they have unsafe food.” WPO is working to create new strategies to help combat food waste in developing countries (via proper packaging).

About 18 billion pounds of plastic waste flows into the oceans every year from coastal regions. “That’s the equivalent of five grocery bags of plastic trash sitting on every foot of coastline around the world.” Less than a fifth of all plastic is recycled globally.

Packaging receives a lot of negative publicity but it could become a solution rather than a problem by helping to limit food waste, and thus, hunger, “as there is a lot of packaging waste — approximately 40% of plastic produced is for packaging and is used only once and then discarded.”

The future of sustainable packaging is not just in smarter use of materials, light weighting, reduction and recycling, but also in empowering consumers with the ability to lead their lives in a more environmentally positive way. “It is about changing consumer behaviour. There is a solution but everyone around the world needs to be involved.”

There are sustainable opportunities in packaging such as:

- Manufacturing smaller packs
- Finding methods to reduce the cost of production
- Using recyclable materials (reuse, recycle, re-purpose)
- Increasing flexibility by offering diverse shapes, sizes and variety to meet demands

“The only way to fix the problem and achieve sustainability is by educating, equipping and empowering future generations.”

I gave the same message whilst in Lebanon, the week before attending PackExpo. It was well received by both industry, government and consumers. I will continue to use all opportunities in spreading the WPO objectives and together find ways in reducing food waste, improving packaging, saving food and reducing poverty.

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Around the World
WPO and UNIDO mission to Mongolia
WPO and UNIDO (www.unido.org) mission to Mongolia was a total success, as reported by WPO Vice President Conferences, Exhibitions and Awards, Soha Atallah, that is also the Executive of LibanPack (www.libanpack.org). She and WPO General Secretary, Johannes Bergmair, were there to the training “From packaging to marketing for food products” partnered with UNIDO within the framework of EU funded ‘Support to Employment Creation in Mongolia (SECiMC2)’ project, which is jointly implemented by UNIDO, UNFAO and MoFALI (Ministry of Food, Agriculture and Light Industry).

Besides the training that was attendend by local cheese producers and meat processors and the visit to some local packaging producers, WPO representatives also had the chance of meeting the Mongolian Minister for Food, Agriculture and Light Industry and the executives of MUPA.

The emphasis of the meetings was the partnership between UNIDO and WPO as well as the first observations of the experts in Mongolia and possible collaboration with MoFALI and MUPA. “The Minister welcomed us warmly with positive feedback. He also signed the training certificates that were given to the training participants”, reported Soha Atallah.

This training in #Mongolia is another positive result of the MoU between UNIDO and WPO signed in November 2017.
IoPP initiative prepares PepsiCo for today’s packaging challenges

PepsiCo is well under way in an ambitious training initiative intended to strengthen its ability to respond to 21st Century packaging challenges. An initial group of 20 package developers, within the multinational company's global R&D group, were selected by their leadership to complete the Institute of Packaging Professionals’ (IoPP - www.iopp.org - that is WPO member in USA) Certified Packaging Professional (CPP) training program.

The training partnership with IoPP provides employees an opportunity to strengthen their credentials and receive industry recognition as those who can provide leadership as broader subject matter experts. According to Yolanda Malone, Vice President PepsiCo, “the program with IoPP will be ongoing, to the extent that CPP will become a common achievement within PepsiCo’s sizeable packaging department”.

The company approached IoPP several years ago to begin laying the groundwork for the program. There were several initial challenges. Chief among them was the learners were from around the globe, working in the U.S., Mexico, Brazil, the U.K., India and China.

PepsiCo began by licensing IoPP’s Fundamentals of Packaging Technology online course and arranging an IoPP membership for each student (a requirement for IoPP certification).

Throughout the initial complete process, IoPP tracked each of the 20 learner’s progress and reported it back to the PepsiCo management team. After completing the review sessions, the first candidates within the group began the certification process in January 2019. It requires passing an extensive online exam testing knowledge proficiency in each major area of packaging, as well as completing a resume of activities, documenting their achievements in packaging, such as earning patents, writing professional articles or presenting as subject matter experts at conferences.

The certification initiative fits the big picture at PepsiCo, which operates in more than 200 countries, and currently has associates in a dozen countries IoPP-certified across its food and beverage businesses. The training program has elevated the caliber of each certified team member, giving them greater flexibility and depth of technical knowledge, while providing the associates with a common education and similar terminology, which will benefit the long term company’s mission. In the second half of 2019, PepsiCo has begun putting a second group of about 30 professionals through the IoPP program.

Packaging Innovation Awards 2019 in Greece

The awards ceremony was organized and hosted by the Marketing Week, Plant Management and Self Service (of Boussias Communications) magazines with the cooperation WPO member AGMPM (Association of the Greek Manufacturers of Packaging and Materials - www.pac.gr).

The awards ceremony on the Gazarte stage was attended by more than 200 high-ranking business executives, advertising companies, designers, creative firms and representatives from various bodies and professional associations.

At the beginning of the awards ceremony the participants were welcomed by the Chairman of the jury, George Avlonitis (chairman of the Greek marketing academy), who emphasized the vibrant response of the companies, which are involved in the industry chain of packaging, mentioning that submission has increased more than 20% since the previous competition.
Businesses from a broad spectrum of industries participated and were awarded at the ceremony. In various categories, Golden Awards were given to the following companies: Apivita, A. Hatzopoulos, A.S. Advertising, Agrino, Ahaean Land, Coca-Cola 3E, Elixir Tea, KM Creative, Lidl Hellas, LKC Drinks, MILK Branding Professionals, Paperpack, Papoutsanis, Pressious Arvanitidis, Red Design Consultants, Superfy, Athenian Brewery, Helios Pasta, Epikinonin Creative Team, Hatzigiannakis Pebbles, Loumidis, Lyhnia, Melissa and Barba Stathis.

All the Packaging Innovation Awards winners have the privilege to participate and claim an award at WorldStar, the global packaging competition organized by WPO.

A special moment during the evening was the bestowal of the Honorary Awards upon Hekomoglou and E. Roupa (authors of the book entitled “Into the Greek Packaging History”) as well as upon K. Evripidis (CEO of Genesis Pharma) for his valuable contribution to innovative approach reinforcement and to the interconnection between the academia and the business community.

Young stars of packaging design were chosen in Turkey

Results of Packaging Design National Student Competition 2019, held for the 15th time this year by the Turkish Packaging Manufacturers Association (ASD), a WPO member, have been announced. Emphasizing that 152 student projects were submitted for the competition (with 18 winners), ASD Secretary General and WPO Vice President Education, Aslihan Arikan, said: “Our competition is very important not only for students but also for the industry and country. A package design is at least as much important as the product it contains. Hence we attach great significance to our young designers”.

Students projects were evaluated by the Selection Committee on July. First, Second, Third, Honorable Mention and Certificate ranking will be announced with a ceremony that will take place in the opening of Eurasia Packaging Istanbul Exhibition, on October 23.

Bringing major packaging manufacturers in Turkey together, ASD allows students to reflect their dreams on design. Emphasizing that packaging design requires creativity, Aslihan said, “Packaging design is as important as the product and creates more value. People applying to our competition from various colleges should believe in their goals and work hard to achieve their dreams. Moreover, students who succeed in our competition are entitled to 12 months scholarship a year. They will also be able to take part in WorldStar Student, organized by WPO - and AsiaStar, organized by APF (Asian Packaging Federation – www.asianpackaging.org), also a WPO member.”

13 student projects that won a rank in the 14th Packaging Design National Student Competition, organized last year, were entitled to take part in AsiaStar and WorldStar Student competitions. Turkey returned with 2 Honorary Mentions and 11 Certificates from WorldStar Student and 6 from AsiaStar, which are competitions hosting hundreds of students worldwide and proved the strength of its packaging industry to the whole world once again.
Packaging against food waste

WPO member in Australia, AIP (Australian Institute of Packaging - www.aipack.com.au) showed, for another year, the power of packaging in the fight against food waste and hunger. AIP members packed 16,705 kgs of food orders at Foodbank WA facilities; they picked and packed on-line orders and mixed grocery boxes.

The team supported over 23 charities across the state by packing their food orders. The amount packed is equivalent to approximately 30,100 meals for the local community and it can feed a family of four, with three meals a day, for 2,508 days or 6.87 years. The AIP is looking forward to running the same program in 2020 and also introducing a NSW version.

From the board

New projects with UNIDO

WPO General Secretary and Director of Packforce Austria (www.packforce.com.au), Johannes Bergmair, and his assistance Barbara Zottl, together with Ernst Krottendorfer, also Director of Packforce, visited UNIDO (www.unido.org) office located at the United Nations headquarters in Vienna (Austria).

The purpose of the visit was to discuss a study on existing tools for environmental assessment of food packaging that is being conducted by WPO and its Austrian member, Packforce Austria. “We had a great opportunity of discussing with our UNIDO colleagues, Ali Badarneh and Heba Hamed, the next steps of this important study along with following up future projects”, explains Johannes.

Congrats to Aslihan Arikan!
WPO Vice President Education, Aslıhan Arıkan, was elected President of APF (Asian Packaging Federation – www.asianpackaging.org). So now, she is coordinating two WPO member associations, ASD (www.ambalaj.org), from Turkey and APF in Asia.

The election was in Bangkok during the 68th Board Meeting of APF that also included the AsiaStar 2019 judging. At the same occasion, the following were elected to APF Board:

- Wang Yuezhong – 1st Vice President (China)
- Joseph Ross Jocson – 2nd Vice President (Philippines)
- Betty Tan – 3rd Vice President (Singapore)
- Pattra Maneesin - Secretary General (Thailand)
- Sunil Costa – Treasurer (Sri Lanka)

WPO Global Ambassador, Chakravarthi Avps, was there to give warm congrats to the new APF Board.

**WPO at PACK EXPO Las Vegas**

Three WPO Execs – President Pierre Pienaar, Vice President Soha Atallah and Press & Communication Officer Liliam Benzi – were at PACK EXPO Las Vegas representing the Organization and attending to the visitors in the institutional booth at the Partner Pavilion. During the show, Pierre also participated in the official press conference organized by PMMI (The Association for Packaging and Processing Technologies – www.pmmi.org). He shared the stage with Jim Pittas, President and CEO of PMMI and Jorge Izquierdo, Vice President Market Development PMMI. Pierre’s presentation was ‘How packaging powers sustainability, food safety and positive strides for human kind’.

Pierre also made a presentation at The Forum. In his words: “Packaging affects everyone in some way or another. Packaging represents 3-5% of all waste. We have also to consider that from 30% to 35% of food is wasted and this can be avoided by using the correct packaging!”
Soha’s presentation at The Forum focused on ‘Packaging as a marketing tool’. She highlighted how good packaging design differentiates products from the competitors in the crowded supermarket shelves.

WPO participation at PACK EXPO Las Vegas was extended to the Showcase of Packaging Innovations where some WorldStar winners were exposed.

**Expert Group Meeting at UNIDO**

As part of the MoU between UNIDO (www.unido.org) and WPO, some WPO executives participated in an Expert Group Meeting at UNIDO headquarters in Vienna (Austria). The purpose of the meeting, according to WPO Ambassador Kishan Singh, was to evaluate and draft a tool for products’ value chain assessment, in developing countries, considering packaging efficiency and sustainability.

“...The project is based, essentially, in developing packaging solutions to save food in emerging economies yet maintaining a triple bottom line. Today the post harvest wastage in countries like Kenya, could be more than 42%", completes Johannes Bergmair, WPO General Secretary.

Vice President Marketing, Luciana Pellegrino, and Vice President Sustainability, Antro Säilä, also participated in the Expert Group Meeting. According to them, the UNIDO document says: “The basis for improvement in the environmental sustainability of packaging lies in measuring direct and indirect effects in addition to the circularity of packaging in a comprehensible way.”.

UNIDO and WPO aim to design a global diagnostic tool to assess packaging practices along selected agro value chains. Also, to better understand the actual packaging practices and processes and to be able to compare them across value chains, countries and regions and to identify best practices. This tool will allow informed decision making and steer packaging
interventions towards more sustainable options. Most importantly the tool will provide reliable data on which current packaging practices can be replaced by more sustainable solutions without compromising the primary role of the package “to protect and preserve” the product.

**Discussion about Sustainable Packaging in China**

Five WPO Execs participated in WPDT - World Packaging Design and Technology Conference, in Hangzhou (China), organized by the local WPO member, GPC (Global Packaging Centre - www.gpcenter.com). As the name suggests, the event focused on the challenges to produce sustainable packaging through project and design. The Executives participating were the President, Pierre Pienaar; Vice President Marketing, Luciana Pellegrino Abre; Vice President Sustainability, Antro Säilä; Global Ambassador, Chakravarthi Avps; and General Secretary, Johannes Bergmair.

Pierre Pienaar’s presentation “New developments in smart packaging opportunities’ showed that “smart packaging are packaging systems with embedded sensor technology used with foods, pharmaceuticals, and other types of products. It is used to extend shelf life, monitor freshness, display information on quality, and improve product and customer safety. All aspects that the consumer certainly wants and sometimes requires.”

Luciana Pellegrino delivered the message that “packages and packaging design have always been a key and strategic marketing tool for FMCG goods for building the brand identity, building the connection with the target audience for strategically positioning the product and indicating the best suitable occasion to use and consume it”.

“New sustainable materials for the packaging industry” was the theme of Johannes Bergmair’s presentation in China. Antro Säilä presentation’s title was “Challenges and Opportunities of Packaging in Circular Economy”. And Chakravarthi Avps participated as the moderator/MC for the conference and also will host a panel discussion in the afternoon called “Design Summit Forum: New Packaging Materials and Technology”, in which former WPO President, Thomas Schneider, also participated.
WPO at FachPack Nürnberg, Germany

WPO General Secretary, Johannes Bergmair, took part in the 03 days lasting FachPack 2019 in Nürenberg, which is one of the leading European trade fairs for packaging. As a guest speaker, he gave 05 different lectures on very interesting topics, which are important for the further development of the sector.

At FachPack, everything revolves around the latest innovations and further developments in the packaging industry. Visitors from packaging-related industries could gain a deep insight into the developments and trends in the packaging industry, which is represented along the entire process chain by over 1,500 exhibitors.

The range extends from packaging, to packaging technology and packaging processes, as well as to packaging and labelling technology, intra- and packaging logistics, packaging materials and printing.

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Education

Packaging training in Lebanon

WPO and its Lebanese member, LibanPack (www.libanpack.org), organized a “3-Day Training Course on Packaging Technology” that was hosted at LibanPack Offices, in Beirut, from 10th to 12th September 2019. The trainer was WPO President, Pierre Pienaar, who has more than 35 years of experience in packaging training and consulting.

This training falls under the joint capacity building interventions between WPO and LibanPack, aimed at strengthening the packaging industry in member state countries through enhancing innovation and technology transfer.

20 packaging professionals, from leading packaging industries in Lebanon, participated in the 3-day training program. The program, developed and operated by WPO, covered a number of topics including the functions of packaging, packaging materials and machinery, and labelling and intelligent packaging. It addressed global packaging challenges and highlighted the latest technologies. The local coordination was from by Soha Atallah, Executive of LibanPack and also WPO Vice President Conferences, Exhibitions and Awards.
First packaging training in Brazil

WPO Ambassador, Kishan Singh, was the instructor in the Packaging Week, in Brazil, organized by local WPO member, ABRE (Brazilian Packaging Association – www.abre.org.br). The 3 days program (October 01-03) was held at Escola Senai Mario Amato and gathered 30 Brazilian packaging professionals.

Efficiency, quality and processes management are some of the key issues, as well as the visit to the Center for Research and Innovation of Advanced Packaging Materials of Senai.

With this initiative, ABRE and WPO aim to highlight the capacitacion and promotion of knowledge among the packaging industry, based on WPO mission: ‘Better quality of life through better packaging for more people’. The program was coordinated by ABRE’s Executive, Luciana Pellegrino, that is also WPO Vice President Marketing.

WPO packaging trainings increase around the world

WPO’s Packaging Training in Kenya achieved desired result. The trainer was WPO Ambassador, Kishan Singh.

With an intense agenda of packaging trainings around the world, WPO is celebrating the achievement of 48 training programs ministered in 14 countries with the participation of 1,823 students, as reported by WPO Vice President Education, Aslihan Arikan.

The first training of 2019 was organized in Amman (Jordan); the second and third trainings were in Nairobi (Kenya) and Beirut (Lebanon), respectively. For the first time, WPO training program was accomplished in Brazil.
The remaining approved programs for 2019 are:

- IRIP & WPO Packaging Design and Technology Training in Iran (October).

Some new education initiatives are being discussed and planned in Asia, Sub-Saharan Africa, Central & South Americas, Eastern Europe and the Middle East.

The future potential training programs will be:

- Packaging Technology
- Food Packaging Technology, 
- Advanced Packaging Technology
- Packaging Graphics & Design,
- Quality Management Subjects.

For more information you may contact Aslihan Arikan, WPO Vice President of Education & Chair of Education Committee a.arikan@worldpackaging.org.

Country Report

Turkey: export is on the rise while import declines in packaging

One of the major countries of the region in packaging production, Turkey maintains its strong position in 2019. In particular, the great increase in foreign trade surplus as observed in the data from the local WPO member, Turkish Packaging Manufacturers Association (ASD – www.ambalaj.org.tr) for the first half of the year drew a lot of attention.

The packaging industry increased its packaging export to 1.26 million tons with 11% increase in the first half of 2019 whereas it was 1.13 million ton in the first half of 2018 and achieved US$2.323 billion in value with 1% increase. A striking decrease was observed in import during the same period. 900,000 tons in the first half of 2018, packaging import shrunk to 720,000 tons during the same period in 2019. In terms of value, import declined from US$ 1.767 billion to US$ 1.405 billion, scoring 20% reduction.

Thus, foreign trade surplus in the packaging industry increased from US$ 539 million to US$ 918 million, namely by 70% in the first half of the year compared to the same period last year.

Turkey exported to UK, Germany, Iraq, Israel and Italy the most this year and made its highest amount of import from Germany, China, Italy, USA and France.

According to Aslihan Arikan, Secretary General of ASD and WPO Vice President Education, “The second half will be even better”. Evaluating the first half of the year in the packaging industry, she said the positive contribution of the industry to current deficit is increasing.

“As the packaging industry, we need to work to make higher amounts of export and to export at least half the packaging we produce in Turkey”.

For more information, contact Aslihan Arikan by e-mail a.arikan@ambalaj.org.tr.
Message from General Secretary

Traveling around the packaging world

Have been to Mongolia on a very special UNIDO/WPO mission to visit a new upcoming WPO Member in August. Then going to China attending a well organized First World Packaging Design and Technology Conference in Hangzhou (well done Cherry and Mr. Yu!). Followed by one week of visiting glass production in Austria. End of September: Fachpack! Europe’s largest trade show around packaging. Met all my European packaging friends there within three intense days and established new, interesting contacts! Now at the moment sitting in hotel in Germany after a week of packaging trainings and audits. Next week: Going to Iran to meet Afshin and Pegah there – doing several workshops in different cities!

Why am I telling you this? Because we discussed ONE topic at all of these meetings: packaging’s role in a more sustainable world! This topic is really on top of the list all around the world. Is it challenging for our industry sector? Yes, but I’m convinced that packaging is part of the solution, not the problem.

How this solution looks like? I don’t know exactly, but I have some good ideas. And I’m not alone! Within our WPO “cloud” of members, corporate partners, members of members, friends, partner institutions etc, there are many other ideas – most of them better than my own ideas. That is what it is about: I’m sure that WPO can make a big contribution in realizing a better and more sustainable world, with better and more sustainable packaging for more people.

So, let’s talk about it and then just do it during the second WPO Board Meeting of 2019. The facts:

**Date:** 3-8th November  
**Venue:** Inaya Putri Bali, Nusa Dua (https://inayaputribali.com)  
**Proposed program:**

- Sun, 03 November 2019: Executive Meeting  
- Mon, 04 November 2019: World Star Judging  
- Tue, 05 November 2019: Working Groups (+ Corporate Partners)  
- Wed, 06 November 2019: Conference  
- Thu, 07 November 2019: Board Meeting  
- Fri, 08 November 2019: Sightseeing

If you have any questions, just contact Barbara or me.

See you all in Bali!

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Norwegian roadmap may solve plastic problems

By Kari Bunes*

Plastic waste is a global threat to the environment. The Forum for Circular Plastic Packaging handed a new roadmap to the Norwegian Government on the 12th August 2019. The roadmap contains several suggestions on how Norway can contribute to solve this.

Together with the Government, industrial companies, retailers, organisations and consumers should make sure that plastic packaging waste is submitted into a circular loop where the sources are recycled and reused. Such measures will prevent plastic waste and reduce the climate emissions.

"Plastic has unique properties that are well suited for packaging purposes", says Ellen Behrens, director Sustainability at Orkla ASA, and leader of the Forum for Circular Plastic Packaging. "However, we need to keep it from ending up in the nature, Behrens continues. It is challenging that valuable resources are lost, because a lot of the plastic waste is being incinerated. Even though we have good systems for collecting and sorting plastic packaging in Norway, we are far from the new EU targets for material recycling. This roadmap will speed up our work to make sure that plastic packaging is being recycled and does not end up in the nature."

According to the new EU targets, 50% of all plastic packaging must be material recycled by 2025 and 55% by 2030. A lot of measures must be made to reach that target, according to the Forum for Circular Plastic Packaging.

In Norway the material recycling rate for plastic packaging was 30,6% in 2017. To reach the EU targets for 2025, 50.000 tons more plastic packaging must be recycled every year.

The reasons why the recycling rates are this low in Norway, is mainly that the packing is not designed for recycling. Further, the recycling technology is not good enough and there is no functioning market for buying and selling recycled plastic packaging.

The Forum points out that the targets cannot be reached without active measures from the Government. Local differences in the systems for collecting packaging waste affect the recycling rates. Besides this, the customers have little knowledge about these systems. They need help to make the sorting easier at home, says Bunes.

The Roadmap was handed to the Norwegian Minister of Climate and Environment, Ola Elvestuen. At the occasion, he said: "I really appreciate the work that has been done here. Norway should lead the way by reducing marine plastic waste through offensive national measures and by contributing to progresses in international work in this field. I look forward to reading the Roadmap and the suggested measures."
The Forum for Circular Plastic Packaging was founded by the Norwegian Packaging Association in 2018. The 30 member companies of the forum are committed to grow their competence, increase innovation and research activities, developing new packaging and make sure that the packaging is easily recycled.

It is important to look at the entire supply chain to make sure that plastic packaging is properly treated and reused. The global use of plastic is expected to grow three times bigger before 2050, so we need to make plastic circular. According to experts, Norway is well positioned to be a global leading star on this field.

*Kari Bunes* is Director of the Norwegian Packaging Association, a member of WPO.

Special Article

Re-designing your packaging with Reduce, Reuse, Recycle in mind

By Nerida Ke том MAIP*

As a consumer you most probably would have read about the Waste Hierarchy and the 5R’s. From a consumer perspective they are:

1. **Refuse**: Don’t purchase unwanted items
2. **Reduce**: Eliminate single use packaging wherever possible e.g.: Decline coffee cups, shopping bags, straws and purchase products that are sustainable
3. **Reuse**: Use products more than once e.g.: Purchase re-usable water bottles, keep-a-cups, recyclable shopping bags.
4. **Recycle**: Ensure that you place your products in the recycling bins and purchase products that are recyclable. Look for products that are using the new Australasian Recycling Label (ARL) to better understand the true recyclability of the materials.
5. **Repurpose**: Purchase products that are made from recycled materials e.g.: Consciously purchase bags, shoes, furniture, jewellery that you know is made from recycled content.

Mindsets have shifted over the last few years and globally consumers are now actively driving brands and their packaging departments to align their Sustainable Packaging Design to incorporate the 5R’s and to re-design with environmental impacts in mind. Packaging Technologists are being asked to re-consider the outcomes of their packaging design all the way across the supply chain from manufacturing to recycling and considering a closed loop and more circular approach. Packaging design can no longer be linear.

When discussing the waste hierarchy from a packaging design perspective **Reduce, Reuse and Recycle** are the three most important areas for significant and long-term changes; as they are the preventative measures with the highest level of impact.

Achievable steps for packaging technologists can include re-designing the shape and size of a product, reducing thickness and weight of materials, shifting to recyclable materials and even developing a closed loop system for products. Any adaptations to the packaging design, structure and form however must not compromise the ultimate purpose of packaging which is maintain the ability to protect, preserve, contain, communicate and transport a product all the way to the consumer. Packaging must remain Fit-For-Purpose first and foremost before any structural changes are made to a pack. The AIP encourages all packaging teams to undertake a lifecycle assessment where possible before any pack is altered.
An effective re-design feature of packaging that consumers are embracing is **Reuse** whereby a customer can **Refill** their products using the same packaging. It is important to note that reusable containers have a greater environmental impact than one that is single use. So Packaging Technologists need to re-imagine their packaging for continued use and the ability to have multiple uses for the consumer. Just like a re-usable drink container, the more that a refillable pack can be used over a longer period of time the less impact the packaging will have on the environment.

Consumers are also driving the focus to what is really happening with packaging and the end of life. Packaging Technologists are now being asked to stop and review their packaging and find out whether it is actually being recycled or landfilled in the country it is sold in. The availability of the APCO Packaging Recyclability Evaluation Portal (PREP) enables this decision making. In addition, if the material is capable of being recycled in the country in which it is sold then consumer waste and GHG emissions will be significantly reduced across the lifespan of the product. This in turn achieves the 2025 National Packaging Targets that all brands are diligently working towards.

If the material is unable to be recycled, then look at the possibility of moving to a recycled content, and even the use of renewable resource raw materials. Once again, we encourage you to undertake a lifecycle assessment if possible, before moving to recycled content to determine if this is in fact the best decision for your product.

A recent example of an innovative Reuse, Refill and Recycle concept that has considered the product all the way through the Supply Chain is Cif ecorefill. Unilever just announced on their global website the launch of Cif ecorefill, the new at-home technology that allows consumers to refill and reuse their Cif spray bottles for life. Cif has worked to create a powerful no-mess solution, becoming the first household cleaning brand to do so with this pioneering twist and click refill design. Made with 75% less plastic, Cif ecorefill simply attaches to the current Cif Power & Shine bottles. Through its innovative technology, it seamlessly releases the super-concentrated product into the bottle, which is filled with water at home. The ecorefills are 100% recyclable once the plastic sleeves are removed and, by the end of 2020, the ambition is for all Cif ecorefills and spray bottles to be made from 100% recycled plastic. Going smaller is certainly better - the ecorefills are lightweight and save on storage space. Diluting the product at home means 97% less water is being transported, fewer trucks on the road and less greenhouse gas emissions. (*www.unilever.com/news/pressreleases*)

Every day more and more companies are announcing refillable packaging solutions including cosmetics and beauty, toiletries like shampoo and soaps, cleaning products and even beverages. The journey to sustainable packaging has only just begun and it is exciting to see what innovative designs packaging technologists are working on that address Reduce, Reuse, Refill and Recycle.

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