# Waste stream mapping: essential tool for circular design

**During IPACK-IMA 2022, staged at Fiera Milano in Italy on 3-6 May, the World Packaging Organisation launched the Waste Stream Mapping Guides that will roll out across 21 countries. PKN was in attendance.**

IN the quest for circular packaging design on a global level, the World Packaging Organisation (WPO) recognises the importance of access to information on packaging recyclability in different countries. To this end, it has launched the 'Waste Stream Mapping Guides' for 21 countries as the second stage of the Global Packaging Design for Recycling Guide program. This initiative has been developed in conjunction with FH Campus Wien University of Applied Sciences, Austria, Circular Analytics and ECR Community.

The 21 countries involved are Australia, Austria, Belgium, Brazil, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Japan, Luxembourg, Netherlands, New Zealand, Russia, Spain, Sweden, Switzerland, United Kingdom and United States of America.

According to Ernst Krottendorfer, co-managing partner of Circular Analytics, who was one of the key developers of the Global Packaging Design for Recycling Guide and the Waste Stream Mapping Tools, "design for recycling is part of a circular product design and represents an important basis for holistic sustainability assessment".

"Accordingly, circularity means that the packaging is designed in such a way that the highest possible recycling of the materials in use can be achieved. The goals here are resource conservation, the longest possible service life, material-identical recycling (closed-loop recycling) or the use of renewable materials," says Krottendorfer. And he adds: "Circular Design is only effective when the relevant collection, sorting and recycling streams exist. From the mapping of the Waste Streams we can better determine technically recyclable packaging types in countries across the world."

The WPO vice president for Sustainability & Save Food, Nerida Kelton, who made the official announcement at the press event, said: "In order to be able to apply recyclable packaging design, a certain fundamental knowledge of sorting and recycling processes is necessary. Packaging must, therefore, be suitable for state-of-the-art sorting and recycling processes in addition to its basic functions (namely storage, transport,

**"From the mapping of the Waste Streams we can better determine technically recyclable packaging types in countries across the world."**
— Ernst Krottendorfer, Circular Analytics

At the WPO press conference during IPACK-IMA: Valerio Soli, president Ipack Ima; Nerida Kelton; and WPO president Prof Pierre Pienaar.

product protection, product presentation and convenience)."

Kelton added: "The Waste Stream Mapping Guides are essential global decision-making tools that will enable anyone to access current information on technically recyclable packaging across the world. They will help those involved in the development of packaging to not only plan in accordance with regional technical recyclability, but to also improve the design at the start to meet the regional requirements, or limitations, for collection, sorting, recovery and recyclability. Using these tools at the start of an NPD process will also bring significant opportunities to eliminate non-recyclable packaging before it is placed on the market."

Kelton explained that the Waste Stream Mapping Guides also come with a 'How to Use Guide' for the Global Packaging Design for Recycling Guide so that they can be used hand-in-hand when packaging is being designed.

"These guides will also be extremely useful to assist companies who are exporting their products and are unsure as to what is technically recyclable, conditionally recyclable or non-recyclable in the country in which the product will be sold. This information will help them to meet the packaging design parameters for that country to ensure recyclability," she said.

The 21x Country Waste Stream Mapping Guides and the How to Use Guide are now available on the WPO website. ■

## THE ORGANISATIONS INVOLVED

### ABOUT WPO

**WORLD** Packaging Organisation (WPO) is a not-for-profit, non-governmental, international federation of packaging institutes, associations, federations and other interested parties including corporations and trade associations. Its mission is "Better quality of life through better packaging for more people". WPO joins 76 members from around the globe, which also includes Honorary Members (12), Affiliate Members (7) and a Regional Federation (1) as well.

### ABOUT CIRCULAR ANALYTICS

**CIRCULAR** Analytics is a consulting firm specialised in Packaging Sustainability and Circular Packaging Design. The company helps clients to apply the principles of Circular Economy to restructure their packaging portfolio. Circular Analytics has developed a proprietary digital tool, The Packaging Cockpit, to analyse the circularity of packaging systems and to optimise the environmental impact of packaging.

### ABOUT FH CAMPUS WIEN UNIVERSITY OF APPLIED SCIENCES

**WITH** over 8000 students at five locations in Vienna and six further cooperative study locations, FH Campus Wien is the largest university of applied sciences in Austria. The team behind the Department of Packaging and Resource Management at FH Campus Wien University of Applied Sciences conducts research in the areas of sustainable packaging development and circular design, as well as methods for assessing the sustainability and safety of packaging.

### ABOUT ECR COMMUNITY

**ECR** Community is the global association for all ECR National organisations in the Retail & Consumer Product Group sector. It is a not-for-profit that provides a neutral platform to develop and share best practices among its network of ECR Nationals and their members. The purpose of the ECR Nationals is to bring together manufacturers, retailers, service providers and industry associations at a national level to share best practice information in areas that are mutually beneficial such as supply chain, category management, sustainability and digital transformation. A key focus area for the ECR Community is the circular economy, given the impact that this transition will have on retailers and manufacturers over the coming years.

AIP

THE AIP CONGRATULATES ALL OF THE AUSTRALIA & NEW ZEALAND COMPANIES WHO WON WORLDSTAR PACKAGING AWARDS

WORLDSTAR WINNERS 2022

SUSTAINABILITY SPECIAL AWARD
SILVER AWARD
Woolworths paper seal Meat Tray

SAVE FOOD PACKAGING SPECIAL AWARD
BRONZE WINNER
Junee Lamb & Sealed Air

LIFETIME PACKAGING ACHEIVEMENT
AWARD WINNER
Graeme Lang MAIP

GENERAL AWARD WINNERS

- Brookfarm – O F Packaging
- The Collective – Pact Group
- Chobani – PakPot
- Junee Lamb – Sealed Air
- Squeezepak – Wellman Packaging
- Woolworths paper seal Meat Tray
- VentX Unico – Omni Group
- Melbourne Coffee – Cyclpac
- Schultz Organic Dairy – Rhima Australia
- Pana Organic – Zipform Packaging
- Cove – Natures Organics
- Zero Co – O F Packaging
- Colgate Palmolive – Wellman Packaging
- Blue Harvest Oyster Tray – BioPak
- Edgell Super Crunch – Simplot Australia
- Colgate Palmolive – Wellman Packaging
- Dove – Pact Group
- Vaccine Protector – Planet Protector Packaging
- Telstra – Birdstone Collective
- New Zealand Post & Sealed Air
- 1/6th Retail Ready pallet – CHEP Australia
- rPump – Zipform Packaging