



**WPO**  
WORLD  
PACKAGING  
ORGANISATION

PACKAGING PACKAGING PACKAGING PACKAGING  
PACKAGING PACKAGING PACKAGING PACKAGING  
PACKAGING PACKAGING PACKAGING PACKAGING

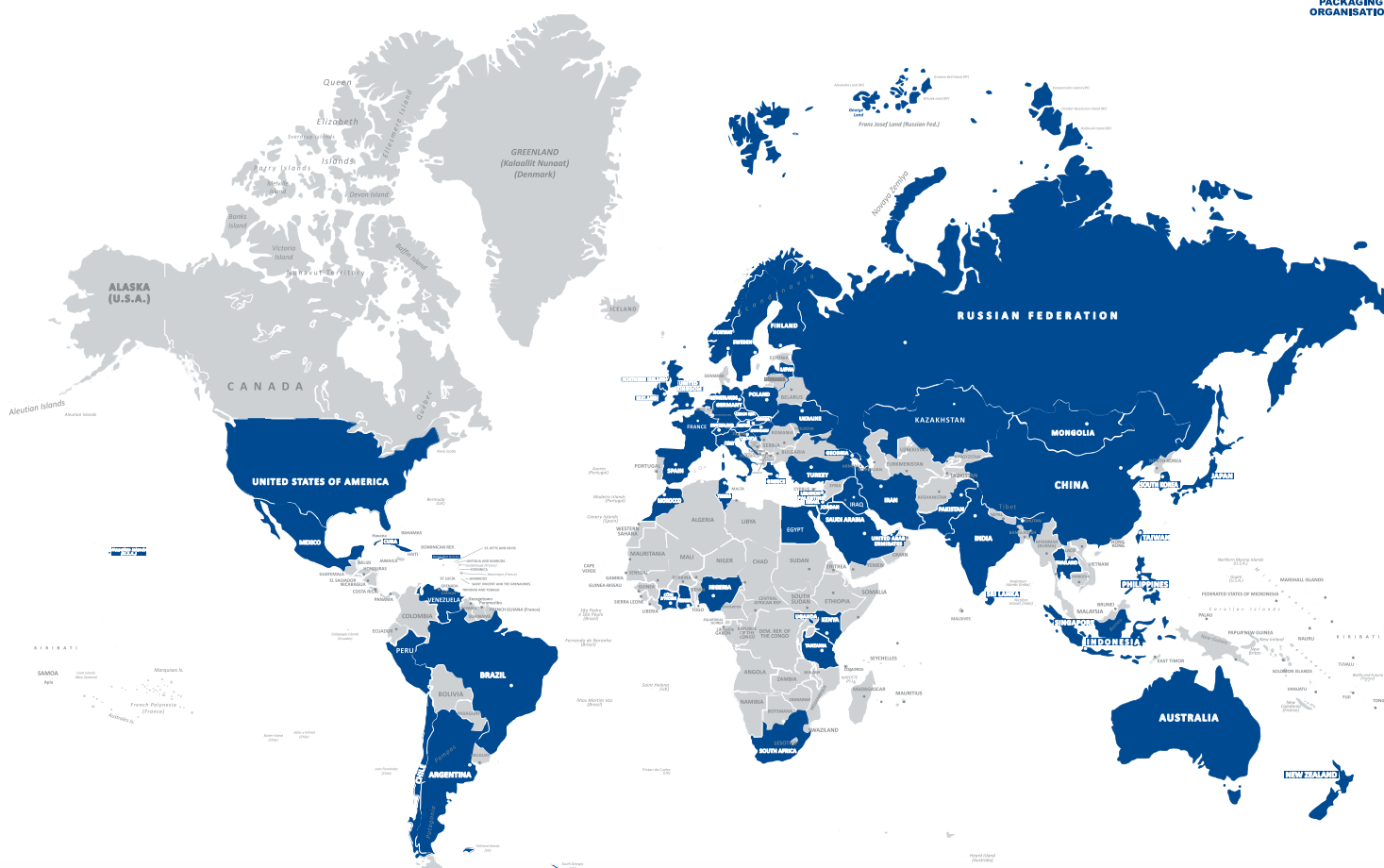


# 2023 WPO Member Sustainability Update: A global lens



[www.worldpackaging.org](http://www.worldpackaging.org)

## World Packaging Organisation (WPO) 64 Member Countries



### World Packaging Organisation (WPO)

The World Packaging Organisation (WPO) is a non-profit, non-governmental, international federation of national packaging institutes and associations, regional packaging federations and other interested parties including corporations and trade associations.

Founded in September 6, 1968 in Tokyo by visionary leaders from the global packaging community, the purpose of the organisation includes:

- Encourage the development of packaging technology, science, sustainability and innovation;
- Contribute to the development of international trade; and
- Stimulate education and training in packaging.

The WPO coordinates the global packaging community!

The primary activities of the organisation today are to build references and share knowledge, to connect the global packaging ecosystem through webinars and conferences, to promote education through meetings, raise the voice for packaging supporting the growth and development of this industry worldwide.

The WPO promotes the WorldStar Packaging Awards that inspires innovation around the globe, and also the WorldStar Student Awards that have been designed to recognised and elevate future packaging professionals, technologists and designers.

#### WPO Vision

*“Better Quality of Life, Through Better Packaging, For More People”*



## CONTENTS

	<b>Global Updates</b> .....	4		<b>Wales</b> .....	49
	<b>Europe</b> .....	9		<b>United States of America</b> .....	50
	<b>Finland</b> .....	22		<b>Canada</b> .....	52
	<b>Austria</b> .....	27		<b>Lagos</b> .....	52
	<b>Belgium</b> .....	35		<b>Kenya</b> .....	53
	<b>Germany</b> .....	35		<b>South Africa</b> .....	64
	<b>Italy</b> .....	36		<b>Brazil</b> .....	66
	<b>Hungary</b> .....	36		<b>India</b> .....	68
	<b>Poland</b> .....	38		<b>Sri Lanka</b> .....	69
	<b>Latvia</b> .....	39		<b>China</b> .....	72
	<b>Slovakia</b> .....	43		<b>Thailand</b> .....	77
	<b>Israel</b> .....	44		<b>Indonesia</b> .....	77
	<b>United Kingdom</b> .....	44		<b>Australia</b> .....	78
	<b>Ireland</b> .....	49		<b>New Zealand</b> .....	96
	<b>Scotland</b> .....	49			

## FOREWORD

**2023 was a dynamic year with many new regulations, directives and programs established and trialled across the world to create a circular economy for packaging.**

The highlights included the Global plastics Pollution Treaty, advancement in Single Use Plastics Regulations, the establishment of Container Deposit Schemes/Return & Earn Schemes and numerous recycling plants being built in all corners of the globe. These are all pieces of the puzzle.

The WPO Members have provided extensive reports into what is happening in their country or region and I encourage you to learn more about what the Sustainability lens looks like for each and every one of our Members. There is no silver bullet and the WPO works collectively to create global impact.



**Nerida Kelton FAIP**  
Vice President - Sustainability & Save Food  
World Packaging Organisation (WPO)



## Global Packaging Design for Recycling Guide Update

The global ‘Packaging Design for Recycling Guide’ has been developed by the WPO, Circular Analytics, FH Campus University of Applied Sciences and ECR Community and is now in 14x languages. The guide is available to download free of charge on the WPO website.



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 (e.g., storage, transport, product protection, product presentation and convenience).

The ‘Packaging Design for Recycling Guide’ is a starting point to understand Best Practice examples using state-of-the-art technology that can then be applied and tailored to suit the recovery and recyclability capabilities and infrastructure on a regional and local level.

### Latest Translation - Japanese

The WPO Global Packaging Design for Recycling Guide has been translated into Japanese, and is now available through the WPO website.

This is the 11th translation besides the versions in English, German, Spanish, Arabic, Portuguese, Thai, Latvian, Czech, Hungarian and Georgian.

The Japanese translation was developed by the Japan Packaging Institute with acknowledgement to Hlroko Akieda, Yasuhiko Ide, Toshio Arita and Mitsuhiro Sumimoto, who were all dedicated to complete the translation by the second WPO Board Meeting for 2023.



**2.3.3 ガラス**

- ✔ 標準的な着色は緑色、茶色、白色 (透明) または関連の色調
  - 通常の三成分ガラス (珪砂、ソーダ灰、石灰石)
  - エングレービングと紙ラベル (耐水性)
- ✘ 耐熱ガラス (例: ホウケイ酸ガラス) など、パッケージ用ガラスではない
  - 鉛クリスタル、クリオライトガラス
  - セラミック部品
  - 全面に塗装されたボトル
  - 全画スリーブ
  - 永久接着剤と広範囲のプラスチックラベル







## Global Packaging Design for Recycling Guide Update

### D4R Guide now available in Thai

The Global Packaging Design for Recycling Guide has been translated into Thai by the Thai Packaging Association and the School of Science and Technology at the Sukhothai Thammathirat Open University.

The official launch of the guide coincided with the Global Packaging Forum at ProPak Asia. The University Translators and the Thai Packaging Association Board and many students were in attendance for the official launch.





## Global Packaging Design for Recycling Guide Translations



Czech



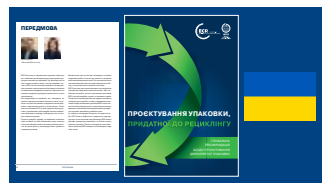
Georgian



Hungarian



Japanese



Ukrainian



Latvian



German



Arabic



Polish



Portuguese



Thai



Indonesian



Spanish



WITH MORE TO COME SOON



English

## Waste Stream Mapping Guides

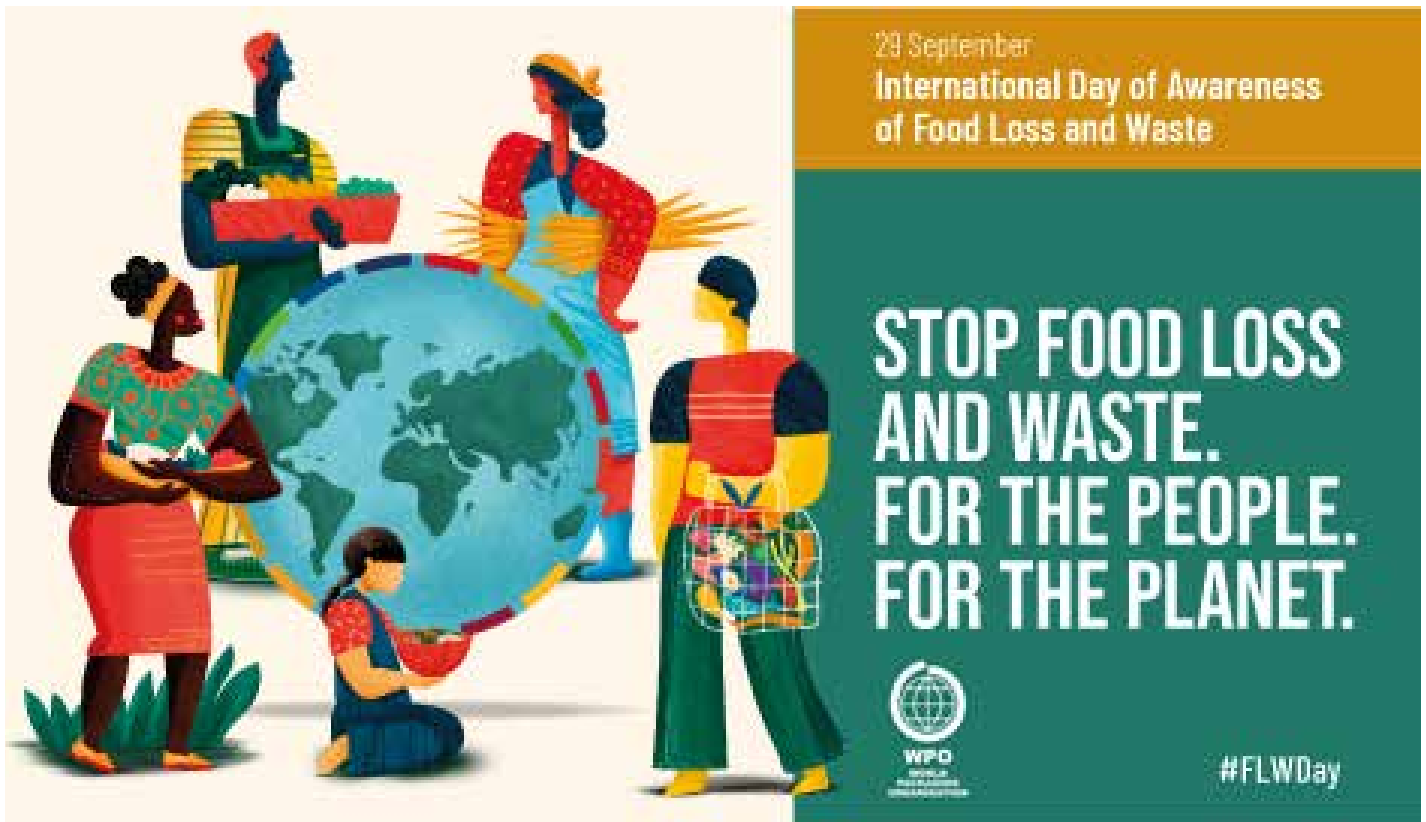
The World Packaging Organisation (WPO), in conjunction with FH Campus University of Applied Sciences, Austria and ECR Community, have launched the Waste Stream Mapping Guides as the second stage of the Global Packaging Design for Recycling Guide program. The Waste Stream Mapping Guides are essential global decision-making tools that will enable anyone to access current information on technically recyclable packaging across the world.

The 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.





International Day of Awareness of Food Loss and Waste (29 September 2023)



**Save Food Initiative**

The SAVE FOOD Initiative aims to contribute to the reduction of global food losses and waste along the entire value chain through a global alliance.

This is achieved by creating awareness, building creative networks, and developing and supporting programs and projects that contribute to reducing food losses and waste.



[www.save-food.org](http://www.save-food.org)

**Project Competition – Save Food Initiative**

The SAVE FOOD Initiative aims to promote more responsible management and efficient use of all resources within the food supply chain by seeking more efficient agricultural practices, better logistics, processing and packaging concepts, household awareness approaches and political engagement in this area.

In this context, the SAVE FOOD Initiative plans to fund a project for 20,000 Euros each year at its own discretion that contributes to reducing the global issue of food losses and waste.





## Save Food Sustainability Award at SWOP & Pacprocess MEA



The WPO have been working with Messe Dusseldorf and Save Food Org to develop two new awards that will be announced at Shanghai World of Packaging (swop) in Shanghai from 22 to 24 November 2023 pacprocess MEA/Food Africa from 12 to 14 December 2023 in Cairo.



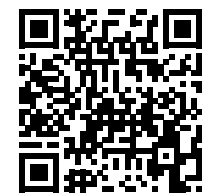
## FAO 5th Impact Webinar series on Food loss & waste reduction

The WPO Vice President for Sustainability & Save Food was a guest speaker at the 5th FAO Impact Webinar.

The fifth Impact Webinar focused on the ways packaging can help prevent and reduce food waste – from the measures that the packaging industry can take to the improvements in date marking and on-pack messages that regulators and food processors might introduce to prevent food waste in retail and households.

The invited speakers, including industry experts, researchers, and policy makers, presented cases and debated about the perception and use of packaging and on-pack messages and visual cues by consumers and food supply chain actors and how this plays a role in food waste generation,

how policy makers and food companies can address food loss and waste by tailoring packaging solutions to the behaviour, needs, and expectations of consumers and food supply chain actors, while observing food safety rules.







## Ellen Macarthur Foundation Global Commitment 2023 Progress

This fifth annual progress report provides an overview of signatories' progress, based on the latest (2022) reported data at aggregate level. It is clear, both from this year's data and taking the longer-term view over the last five years, that the Global Commitment has shown it is possible to make meaningful progress in tackling plastic waste and pollution.



It is equally clear that the world remains off-track. Therefore, it is crucial that we use the learnings of the last five years, and the annual reporting, to drive more ambitious policy and greater business action – to push progress further, faster both within the signatory group and the market as a whole.



## EUROPE

### 4evergreen launches recyclability evaluation tool for fibre-based packaging

The 4evergreenalliance has released the beta version of its Fibre-Based Packaging Recyclability Evaluation protocol, with the tool as a whole expected to create an improved and standardised framework for evaluating the recyclability of packaging products in Europe.



CEFLEX in collaboration with Flexible Packaging Europe, the European Aluminium Foil Association and other key actors are working on 'Designing for a Circular Economy' guidelines for flexible packaging containing aluminium foil.



The new guideline development coincides with an extensive programme of testing to improve understanding and design guidance for flexible packaging being conducted by CEFLEX with support from UK Research and Innovation.



### EU to crackdown on Greenwashing

The European Commission said greenwashing was a notable problem, with 53% of green claims on products or services making "vague, misleading or unfounded information."

About 230 sustainability labels are in use across the 27-nation EU, "with vastly different levels of transparency," according to the commission.

With its 'green claims' directive, the commission wants to set common criteria that would bring more clarity. The European Parliament and EU member countries need to approve the initiative for it to take effect.

Under the proposal, companies that claim the packaging for their products is made of 30% recycled plastic would have to prove it with scientific evidence. EU countries would be in charge of setting up verification processes overseen by independent bodies.



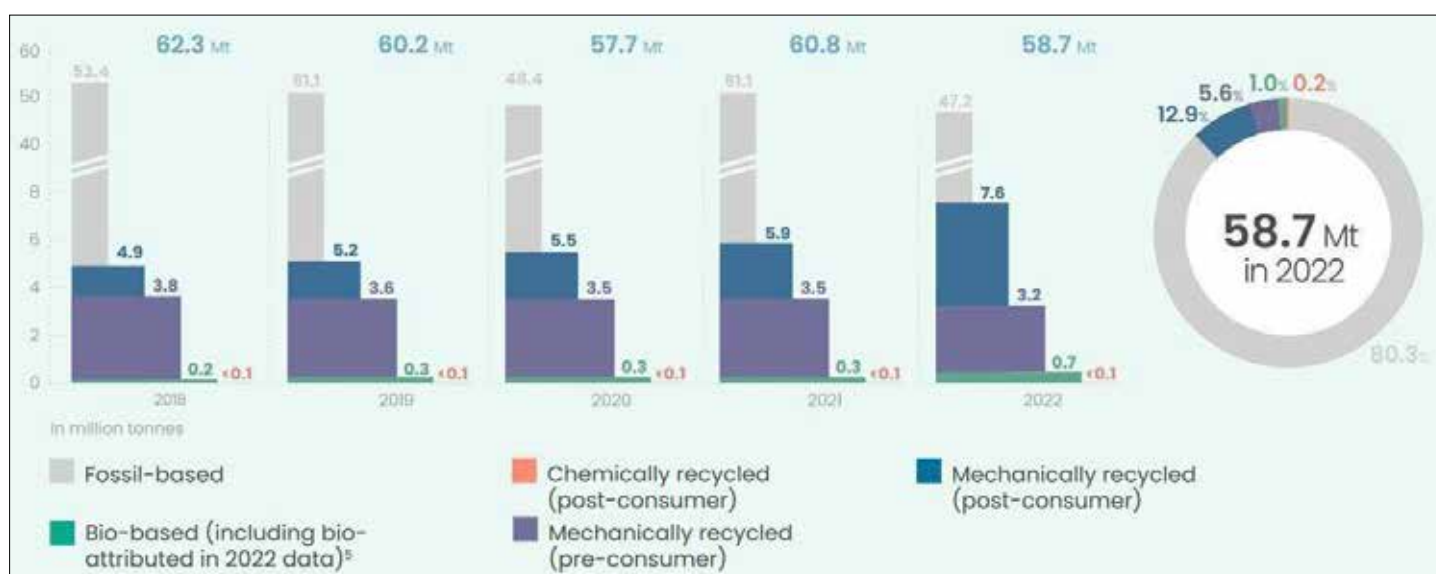
EUROPE Cont.

Country/Regional Reports for Sustainability & Save Food Initiatives, regulations and programs

Plastics Europe has just released its latest annual data in the report "Plastics – the Fast Facts 2023." In the realm of European plastics production, it's noteworthy that the vast majority still originates from virgin fossil sources and this production trend is on the rise, with an increase of 6 million tonnes compared to 2022.

Surprisingly, only about 10.8% is recycled mechanically, with a significant portion stemming from pre-consumer waste.

A striking statistic reveals that 39% of all plastic usage is dedicated to packaging.



Greenwashing on PET

Green claims on PET beverage bottles such as '100% recyclable' or '100% recycled' in Europe are likely to be misleading consumers, according to a new report written in conjunction with ClientEarth, ECOS and Zero Waste Europe.

The report finds that these claims are likely to mislead as PET is not currently a circular material even within the best recycling systems in Europe. The report also finds the term 'recyclable' is too ambiguous and does not have a consistent definition between manufacturers, so should not be used.

100% recycled claims fail to consider all the components of the bottle such as the caps and labels which are rarely, if ever, made from recycled content.

The report recommends that companies should place clear instructions of how to dispose of packaging, adapted to each individual market. It also proposes a common and transparent method for communicating how much recycled content each container contains.



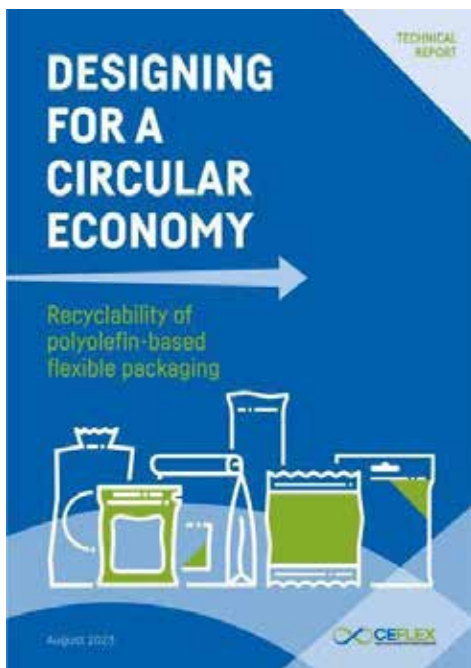
EUROPE Cont.

Designing for a Circular Economy Guidelines

'Designing for a Circular Economy' is a set of comprehensive guidelines to help anyone working in the flexible packaging value chain design packaging solutions which are recyclable.

The guidelines have been developed by, and for, the whole value chain, from flexible packaging manufacturers to brand owners and retailers.

The content is based on broad value chain consensus, using the best available data from testing and commercial practices.



**DESIGNING FOR A CIRCULAR ECONOMY Guidelines summary**

Recyclability of polyethylene-based (PE) flexible packaging

CEFLEX's Designing for a Circular Economy Guidelines give practical support and advice on circular economy design principles. The comprehensive guidelines have been developed to help anyone working in the flexible packaging value chain design packaging solutions which are recyclable.

This table summarises the guidelines for the key elements of a polyethylene (PE) mechanical recycling process. Reasons are provided for the guidance, along with general design advice. The table also identifies the materials and elements being investigated by CEFLEX in phase 2. Please refer to the full technical report of the guidelines for full details.

CEFLEX will be reviewing and updating the design guidelines on a regular basis. See the Designing for a Circular Economy Guidelines Technical Report for full details.

PE	Guidance			Reasons	Advice	Materials and components for investigation in phase 2
	Compatible with PE mechanical recycling	Looks compatible with PE mechanical recycling	Not compatible with PE mechanical recycling			
	Mono PE (including stretchable, extruded, co-extruded) & Laminated PE/PE with or without barrier layers and average areal weight below 100 g/m² PE	Mono PE (including extruded, extruded, co-extruded) & Laminated PE/PE with or without barrier layers or coatings or extruded films > 100 g/m² PE	PE Lanes Mono PE and non-PE based polymer layers & PVC Lanes Biodegradable and compostable materials & Less than 50% PE	Evidence from pilot and laboratory scale of mechanical recycling processes, including the impact of the material and the barrier layer on the recycling process. PE Lanes: PE Lanes are generally compatible with mechanical recycling. Mono PE and non-PE based polymer layers are not compatible with mechanical recycling. PVC Lanes are not compatible with mechanical recycling. Biodegradable and compostable materials are not compatible with mechanical recycling. Less than 50% PE is not compatible with mechanical recycling.	It is suggested that the material is PE Lanes, mono PE and non-PE based polymer layers, PVC Lanes, biodegradable and compostable materials, and less than 50% PE.	Mono PE (including stretchable, extruded, co-extruded) & Laminated PE/PE with or without barrier layers and average areal weight below 100 g/m² PE

August 2023 [ceflex.eu](http://ceflex.eu)

CEFLEX Resources





 EUROPE Cont.


### RecyClass Design Book

Design for recycling offers insight into how different components of plastic packaging must be designed & assembled to be compatible with recycling.

In the RecyClass Design Book, you will find step- by-step guidance into mastering the concepts of recyclability & design for recycling.

Download the latest version, which includes the most recent recommendations in line with state-of-the-art recycling processes.










**RecyClass**

**RECYCLASS DESIGN BOOK**  
A STEP-BY-STEP GUIDE TO PLASTIC PACKAGING RECYCLABILITY

#### KEY PRINCIPLES OF RECYCLASS DESIGN FOR RECYCLING

-  **CHOOSE PLASTICS THAT HAVE A RECYCLING STREAM IN EU**
  - Rigid packaging: HDPE, PP, PS and PET bottles & trays
  - Flexible packaging: PE and PP
-  **MAXIMISE THE PROPORTION OF THE MAIN POLYMER**
  - Recycling processes vary depending on polymers types, thus the use of components made of different polymers should be minimised.
-  **FAVOUR MONO-MATERIAL SOLUTIONS**
  - Combination of various types of plastic may complicate both the sorting and the recycling steps.
-  **REDUCE COLORS AND PRINTING**
  - Colours and printing cannot be removed during recycling.
  - This reduces the visual aspect and quality of the recycle.
-  **ENABLE CONSUMERS TO EMPTY THE PACKAGING ENTIRELY**
  - Large amount of product residues after normal use-phase of the packaging creates added contamination during recycling and results in extra water-treatment steps.

### Design Guidelines for Recyclability for PET bottles

The European PET Bottle Platform (EPBP) launches Design Guidelines for Recyclability for ‘food grade’ Opaque White PET bottles.

The inclusion of opaque white PET beverage bottles in the targets set by the European Commission demonstrates the commitment of the industry towards a more sustainable future.

EPBP has now developed ‘design guidelines for recyclability for food grade opaque white PET bottles and expects that these guidelines will provide crucial support to the mechanical recycling industry for plastics in Europe 🇪🇺.





 EUROPE Cont.

**EU sets legally binding food waste reduction targets**

In order to accelerate the EU's progress towards Sustainable Development Goal Target 12.3, the Commission is proposing to set legally binding food waste reduction targets to be achieved by Member States by 2030, as part of the revision of the Waste Framework Directive, adopted by the Commission on 5 July 2023.

The results of the first EU-wide monitoring of food waste levels carried out in 2020 will serve as a baseline to assess progress towards the targets.

More specifically, Member States are required to take the necessary measures to reduce food waste by the end of 2030:

- by 10%, in processing and manufacturing,
- by 30% (per capita), jointly at retail and consumption (restaurants, food services and households).



**Cepi**

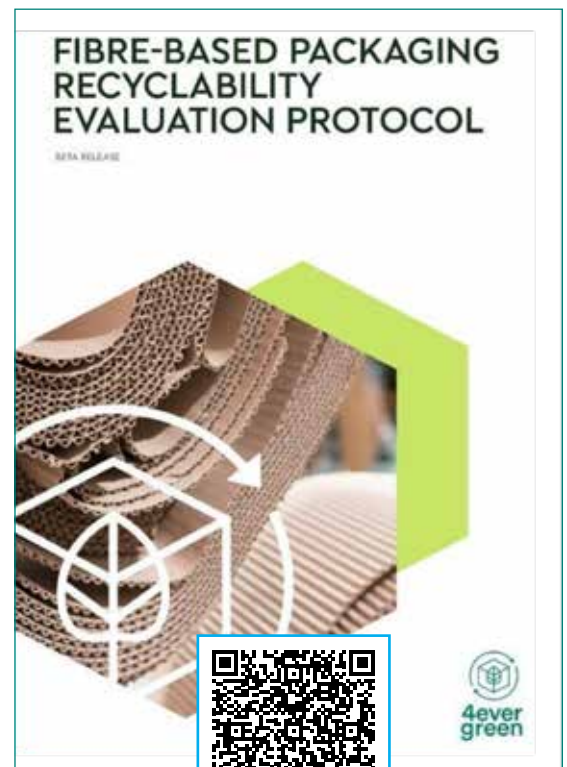
Cepi is the European association representing the paper industry. They offer a wide range of renewable and recyclable wood-based fibre solutions to EU citizens: from packaging to textile, hygiene and tissue products, printing and graphic papers as well as speciality papers, but also bio-chemicals for food and pharmaceuticals, bio-composites and bioenergy.



 EUROPE Cont.

**4evergreen fibre design guidelines and resources**

At the 4evergreen alliance, more than 380 experts from across the fibre-based packaging value chain collaborate to develop expert knowledge and science-based guidelines and recommendations for fibre-based packaging that is compatible with a low-carbon, climate-neutral society.





## EUROPEAN PLASTICS PACT

### The European Plastics Pact wound up its current activities from 15 September 2023.

The European Plastics Pact was the first regional Pact to be established under the Global Plastics Pact network. Initially led by France, the Netherlands, Denmark and Sweden, the European Plastics Pact was a public-private European network of companies, states and other organisations such as NGOs.

The EU legislation and Global Treaty to End Plastic Pollution provides a new opportunity to drive forward the plastics agenda in Europe, and multi-stakeholder collaborations like the European Plastics Pact could be a key part of implementation and as such could be revisited once the Treaty is mandated.



## Global Plastics Treaty United Nations

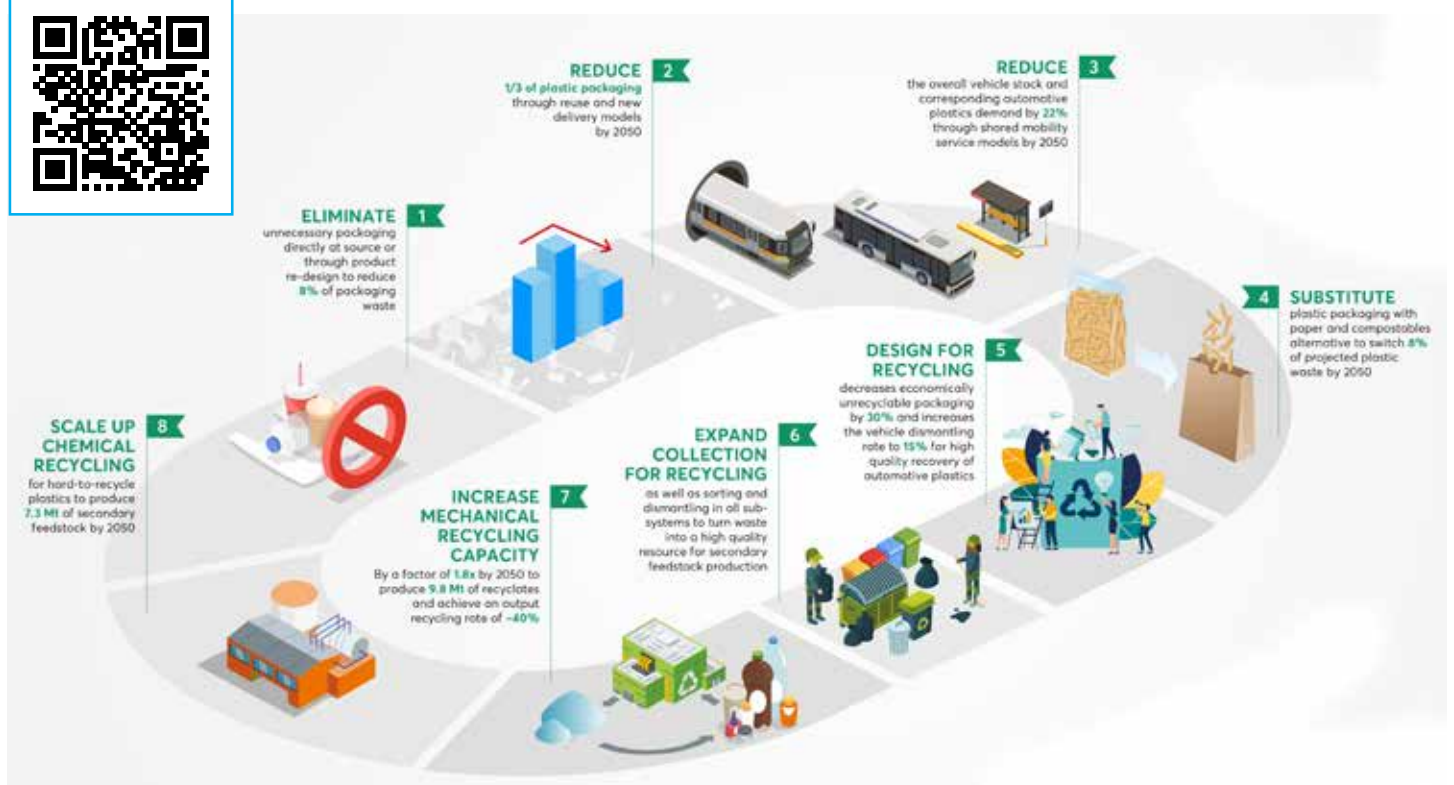
### Nations agree to end plastic pollution - Nairobi, 02 March 2022

Heads of State, Ministers of environment and other representatives from UN Member States endorsed a historic resolution at the UN Environment Assembly (UNEA-5) to End Plastic Pollution and forge an international legally binding agreement by 2024.

The resolution addresses the full lifecycle of plastic, including its production, design and disposal.

175 nations agree to develop a legally binding agreement on plastic pollution by 2024, prompting a major step towards reducing greenhouse gas emissions from plastic production, use and disposal.

<https://www.globalplasticstreaty.com/>















## EUROPEAN PLASTICS PACT CONT.

### Release of Zero Draft Treaty Text

Proposed Treaty Outcomes (based on high-ambition treaty text options)	
	<b>Restrain virgin plastic production</b> Global and/or national reduction goals to reduce primary plastic production to sustainable levels. Natural consequence of moving to a more circular approach. Necessary to achieve broader GHG emission goals and flatten the plastic pollution curve.
	<b>Eliminate harmful chemicals and polymers</b> Eliminate chemicals/polymers identified as being harmful or an impediment to circularity.
	<b>Eliminate problematic and avoidable plastics</b> Eliminate those unnecessary single-use plastics that disproportionately contribute to waste and plastic pollution.
	<b>Improve product design</b> Ensure plastic products and packaging are designed to be safe and for circularity. Intent is that over time, only those products that meet sustainability criteria can be placed on-market (implemented on a sector-by-sector approach). Includes minimum recycled content requirements.
	<b>Extended producer responsibility</b> Countries to establish extended producer responsibility schemes to increase product recyclability, recycling rates, and enhanced accountability (polluter pays).
	<b>Waste management</b> Ensure plastic waste is managed in a safe and environmentally sound manner through its different stages.
	<b>Plastic pollution</b> Measures to prevent and eliminate release of plastics into the environment (including sectoral approaches). Identify and prioritise accumulation hotspots and sectors, share information, take action to mitigate existing plastic pollution.
	<b>Treaty implementation</b> National action plans, monitoring and reporting, finance mechanism, capacity building, compliance and evaluation, information exchange.

### EU updates Packaging & Packaging Waste Regulatory Framework



The EU Commission has published revision of the EU Packaging and Packaging Waste Framework directive

- New minimum mandatory recycling targets across all packaging.
- New member state recycling targets.
- New mandatory reuse and refill targets.
- New reporting and labelling obligations.
- Chemical recycling as counting towards targets.

### Packaging: new EU rules to reduce, reuse and recycle

In late October 2023 the European Parliament Environment Committee adopted its proposals to make packaging easier to reuse and recycle, to reduce unnecessary packaging and waste, and to promote the use of recycled content.

The Environment Committee adopted their position on a proposed regulation establishing requirements for the entire packaging life cycle, from raw materials to final disposal, by 56 votes in favour, 23 against and 5 abstentions.

- Less plastic packaging, to reduce pollution and fossil fuel dependency.
- Ban on 'forever chemicals' in food packaging.
- Consumers to be able to bring their own container for take-away food and drinks.
- Each European generates almost 190kg of packaging waste annually.







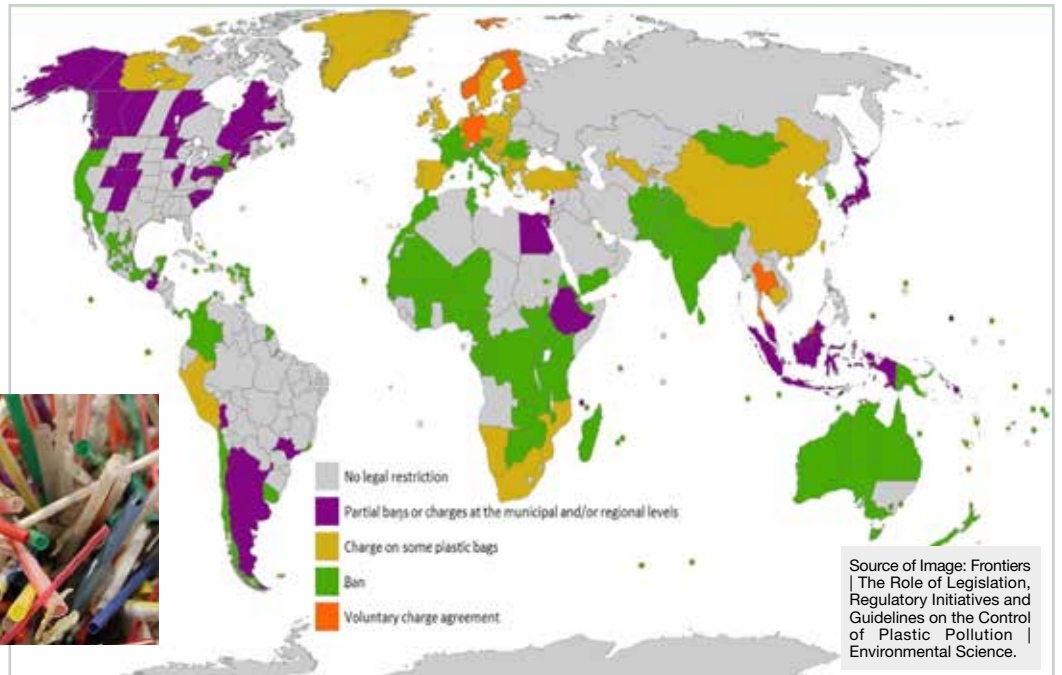
## EUROPEAN PLASTICS PACT CONT.

### Single Use Plastics Directives

There has been a significant amount of countries implementing Single Use Plastics regulations.

Phase out of lightweight plastic bags around the world (laws passed but not yet in effect are not shown on map).

- Plastic bags banned **GREEN**
- A charge on some plastic bags **YELLOW**
- Voluntary charge agreement **ORANGE**
- Partial charge or ban (municipal or regional levels) **PURPLE**



### Latest Countries to Ban Single Use Plastics

The latest countries include England, the Solomon Islands and New Zealand.



**SINGLE USE PLASTIC REGULATION 2023**

Solomon Is.

**Banning Single Use Plastic From**

**1 September 2023**

THESE FIVE ITEMS WILL BE OUR FIRST TARGET FOR THE BAN

For more information please contact the Technical working Committee on Phone: 26035

**Phasing out problem plastics in Aotearoa**  
Te whakamoe i ngā kirihou whakapōraruru

Plastic waste is one of our generation's greatest environmental challenges - regularly ending up in oceans or the street.

To support Aotearoa's move towards a low-emissions, low-waste economy, we're phasing out these plastics over the next four years.

Year	Plastics to be phased out
2022	PVC meat trays, Polypropylene laboratory packaging, Expanded polystyrene food and drink packaging, Dry and photo degradable plastics, Plastic drink straws, Plastic stemmed cotton buds
2023	Plastic produce bags, Plastic plates, bowls and cutlery, Plastic straws, Plastic produce labels
2025	All other PVC and polystyrene food and drink packaging

For more information, visit <https://environment.govt.nz/waste/plastic-phase-out/>

He taiao tōu mā ngā reanga kōwhiri - a flourishing environment for every generation.



## 40 Countries have CDS/DRS/Return & Earn

Approximately 40 countries around the globe have introduced a bottle deposit system.

Including Iceland, Ecuador, the Netherlands, Croatia and all of Scandinavia.



## Which Countries Have Bottle Deposit Systems?

The global status of bottle recycling systems in 2020\*



\* Partly implemented in Australia. Will be fully implemented by 2023.  
Source: The Changing Markets Foundation



statista

## Navigating the EU Directive on Greenwashing

### Objectives

The proposal on green claims aims to:

- Make green claims reliable, comparable and verifiable across the EU.
- Protect consumers from greenwashing.
- Contribute to creating a circular and green EU economy by enabling consumers to make informed purchasing decisions.
- Help establish a level playing field when it comes to environmental performance of products.

**Claims need to be based on scientific evidence and comprehensive LCAs.**

**All green claims will need to be backed up by evidence and years of technical expertise on methodologies, such as lifecycle assessment (LCA).**

- Clear criteria on how companies should prove their environmental claims and labels.
- Requirements for these claims and labels to be checked by an independent and accredited verifier.
- New rules on government, transparent and reliable.



## BEUC – Greenwashing Complaints

European consumer protection organisation BEUC filed a legal complaint against major FMCG companies, Coca-Cola, Danone, and Nestlé.

The complaint alleges that claims of '100% recycled' and '100% recyclable' on single-use beverage bottles across the EU are misleading to consumers.

Supporting BEUC in this action are ClientEarth and ECOS, who have been instrumental in preparing the complaint. The key issue at the heart of the complaint is that these claims are frequently factually incorrect, vague, and unsubstantiated. Such claims may mislead consumers into thinking that buying bottled water is an environmentally sustainable choice, giving rise to concerns about greenwashing.





## Certified Compostable Packaging

A cross value chain platform for collaboration and innovation in compostable materials, technologies and processes, aiming to ensure compostable materials are recycled at scale in Europe.

The Goal: Ensure compostable materials are accepted for organic recycling at scale in Europe.

The Compostable by Design Platform (CbDP) will build a robust scientific and technical evidence base to inform and engage consumers, industry and policy makers in constructive discussion to implement circular pathways for compostable materials.

They have identified five key deliverables that are essential to achieving our goals.

- Harmonised compostability (disintegration) evaluation protocol.
- Design guidelines for compostable packaging and other products.
- Guidelines for improved disposal, collection, and organics recycling.
- Guidelines for clear communication and implementation.
- Guideline for labelling and claims.



COMPOSTABLE  
BY DESIGN



industrially  
compostable

EN 13432



Compostable

AS 4736  
ABAX 9999



Home Compostable

AS 5810  
ABAX 9999

## On-Pack Labelling Programs for consumers

There are three leading on-pack labelling programs that are designed intuitively to enable consumers to accurately dispose of their packaging and separable components in to the correct bins for recycling.

They are:

1. OPRL - On Pack Recycling Labelling in the United Kingdom.
2. How 2 Recycle in the United States.
3. The Australasian Recycling Labelling (ARL) Program in Australia & New Zealand.



How2Recycle is designed to empower people.



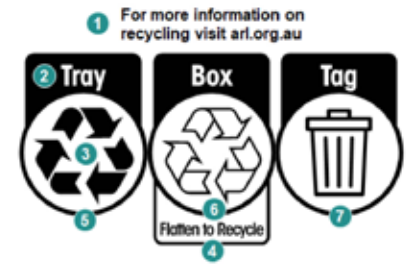
**\*Not recycled in all communities**

**Widely Recycled**  
At least 85% of Americans can recycle this package at curbside recycling or drop-off recycling.

**Sometimes Recycled**  
Between 60% and 75% of Americans can recycle this package at curbside recycling or drop-off recycling. Check your local program.

**Not Yet Recycled**  
Fewer than 20% of Americans can recycle this package. It could create a problem in a recycling facility.

**Store Drop-off**  
Anyone who has a store that accepts plastic bags and wraps for recycling can make this packaging to that store and recycle it there.



## Additional links to real-time recycling data

### How2Recycle piloting shared Recycle Check Label

<b>PAPER BOX</b>	<b>PLASTIC WRAP</b>	<b>PLASTIC TRAY</b>

**\*Not recycled in all communities**

how2recycle.info





## Additional links to real-time recycling data

### Australasian Recycling Label intersects with RecycleMate

The ARL is an evidence-based label, meaning that in order for a piece of packaging to have it, it needs to be assessed first through the Packaging Recyclability Evaluation Portal (PREP).

PREP simulates the recycling ecosystem, from the moment packaging is placed in the bin, gets picked up by a truck, how it travels and gets sorted at the Materials Recovery Facility (MRF), and finally how it behaves once it arrives into the recycle markets such as paper mills, glass beneficiation plants, aluminium and steel smelters and/or plastics processing.

A new collaborative educational approach between the Australasian Recycling Label (ARL) program, and a dynamic platform called Recycle Mate, will provide the community with the information to be able to dispose of used packaging and other materials appropriately and correctly; no matter where you live in the country.

Recycle Mate is a dynamic recycling education platform that combines artificial intelligence technology with Australia's most comprehensive recycling directory to reduce contamination in recycling streams, improve resource recovery and support a circular economy for packaging.



### On-Pack QR Codes for Recycling for consumers

A number of companies and brands are now looking towards the use of QR codes and 2D codes to provide consumers with on-pack and off-pack recycling communication. The codes are dynamic and the information can be updated on a regular basis to suit updates to recycling in the country the product is sold in.





## FINLAND



- **Circular Economy Package**

- Implementation of SUP Directive
- Outcome of other CEP actions

### Packaging and Packaging Waste Regulation

- Initiative by The EU Commission

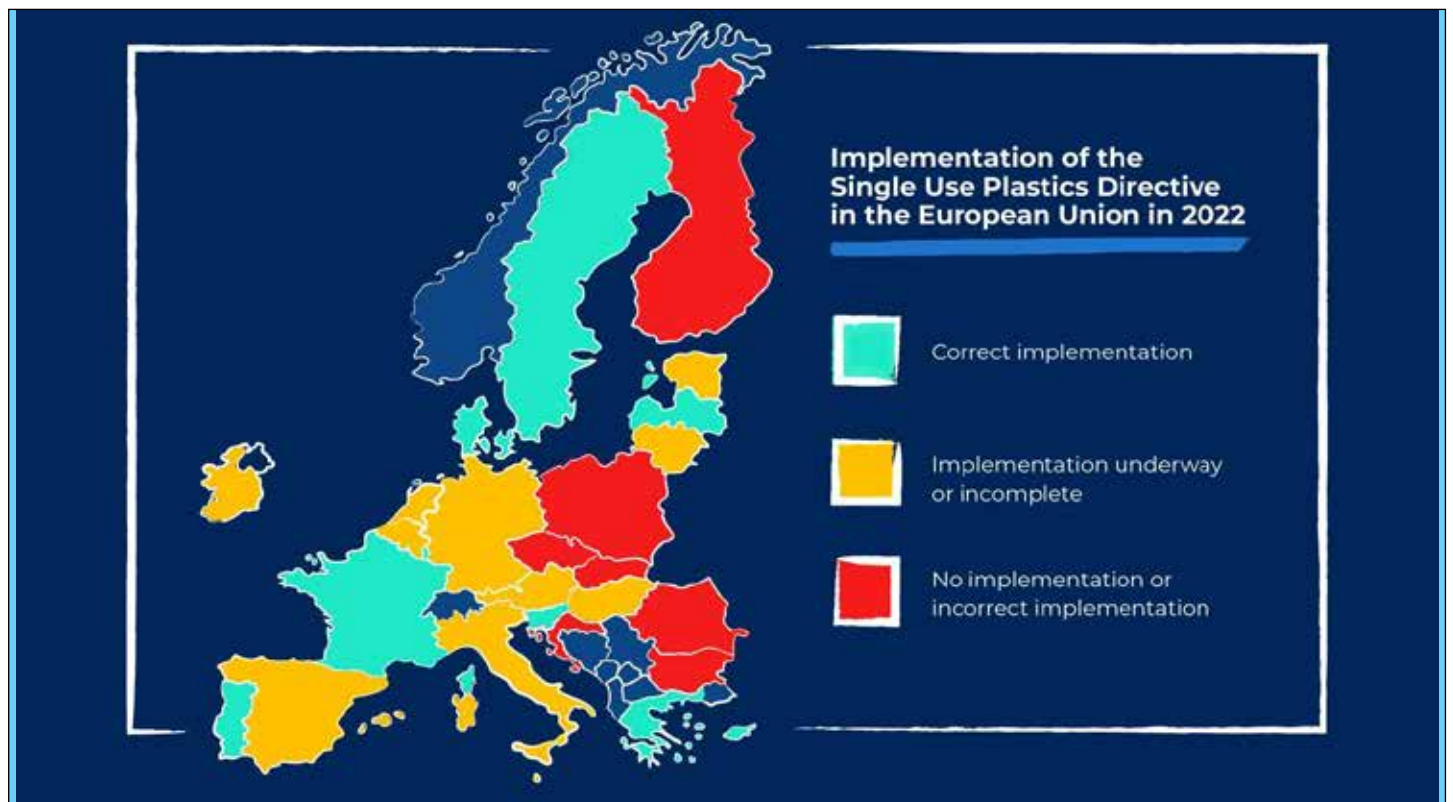
- Regulation of Green Claims in EU

### Single Use Plastics Directive Implementation Assessment Report



Member State	Art. 4 Consumption Reduction	Art. 5 Bans	Art. 6-7 Design-Marking	Art. 8 Extended Producer Responsibility	Art. 9 Separate Collection	Art. 10 Awareness Raising	Overall National Ambition
Austria	Green	Green	Green	Red	Green	Green	Yellow
Belgium	Yellow	Green	Green	Yellow	Red	Red	Yellow
Bulgaria	Red	Yellow	Green	Red	Green	Red	Red
Croatia	Red	Green	Green	Red	Green	Red	Red
Cyprus	Green	Green	Green	Green	Yellow	Green	Green
Czech Republic*	Red	Green	Green	Yellow	Green	Red	Yellow
Denmark	Yellow	Green	Green	Green	Green	Yellow	Green
Estonia*	Yellow	Green	Green	Red	Green	Green	Yellow
Finland*	Red	Green	Green	Yellow	Red	Red	Red
France	Green	Green	Green	Green	Yellow	Yellow	Green
Germany	Yellow	Green	Green	Yellow	Green	Red	Yellow
Greece	Green	Green	Green	Green	Green	Green	Green
Hungary	Red	Green	Green	Red	Green	Red	Red
Ireland	Yellow	Green	Green	Yellow	Green	Yellow	Yellow
Italy	Yellow	Red	Green	Red	Yellow	Green	Green
Latvia	Green	Green	Green	Yellow	Green	Green	Green
Lithuania	Red	Green	Green	Green	Green	Yellow	Yellow
Luxembourg	Green	Green	Green	Green	Green	Green	Green
Malta	Yellow	Green	Green	Yellow	Green	Green	Green
Netherlands	Red	Green	Green	Green	Green	Green	Yellow
Poland*	Red	Red	Red	Red	Yellow	Red	Red
Portugal	Green	Green	Green	Yellow	Yellow	Green	Green
Romania	Yellow	Yellow	Green	Green	Green	Red	Red
Slovakia	Yellow	Green	Red	Red	Green	Red	Red
Slovenia	Yellow	Green	Green	Yellow	Yellow	Green	Green
Spain	Green	Green	Green	Yellow	Green	Green	Yellow
Sweden	Green	Green	Green	Green	Green	Yellow	Green





**Art. 4 Consumption reduction**  
**Art. 8 EPR**

**SUP implementation**

Art. 4 consumption reduction 2022-26:

- Target is to reduce consumption of SUP-packaging of ready-to-eat food Challenges.
- Still today some definitions are missing -> ERP's cannot give data of as is -> impossible to follow-up.
- There are no plastic-free alternatives for all included packaging (yoghurt pots for example).

Art. 8 EPR to include public outdoor area cleaning costs:

- Communities to give annual figures to national authorities who charge the total from EPR-schemes.

**SUP Directive Challenges**

- EU Commission's delegated acts and implementing acts come late and are incomplete -> fragmentation of the EU Single Market.
- EU Member States make own interpretations:
  - Sweden: <10% plastic in product - > not plastic product.
  - Finland >0,01% plastic in product - > plastic product.

**Good News: EU Commission's objectives are great**

- Reduce and avoid environmental impacts caused by single-use plastics.
- Speed-up Transition To Sustainable Circular Economy.

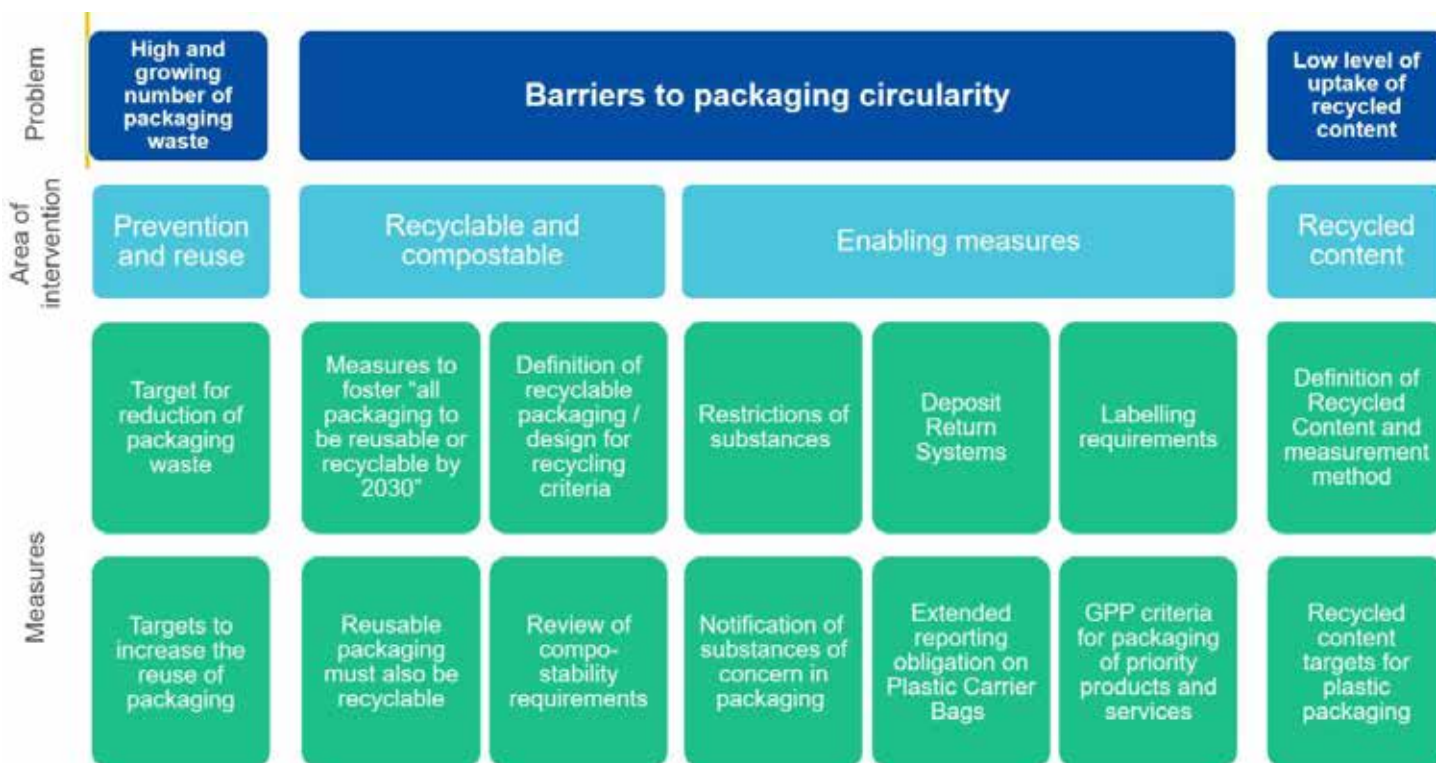
**Bad News: EU Commission's Objectives and Actions are not based on Science or Data**

- Rushing complex regulation (SUP – 11 months in 2019).
- 2023 nobody knows how much SUP-products enter EU market and where they come from.
- EU Commission is chronically late with their secondary legislation.
- Secondary legislation is incomplete and goes against common sense.
- Single-use and plastic definitions.
- Single-use beverage container limit 3 litres.
- Food packaging has no limits whatsoever.

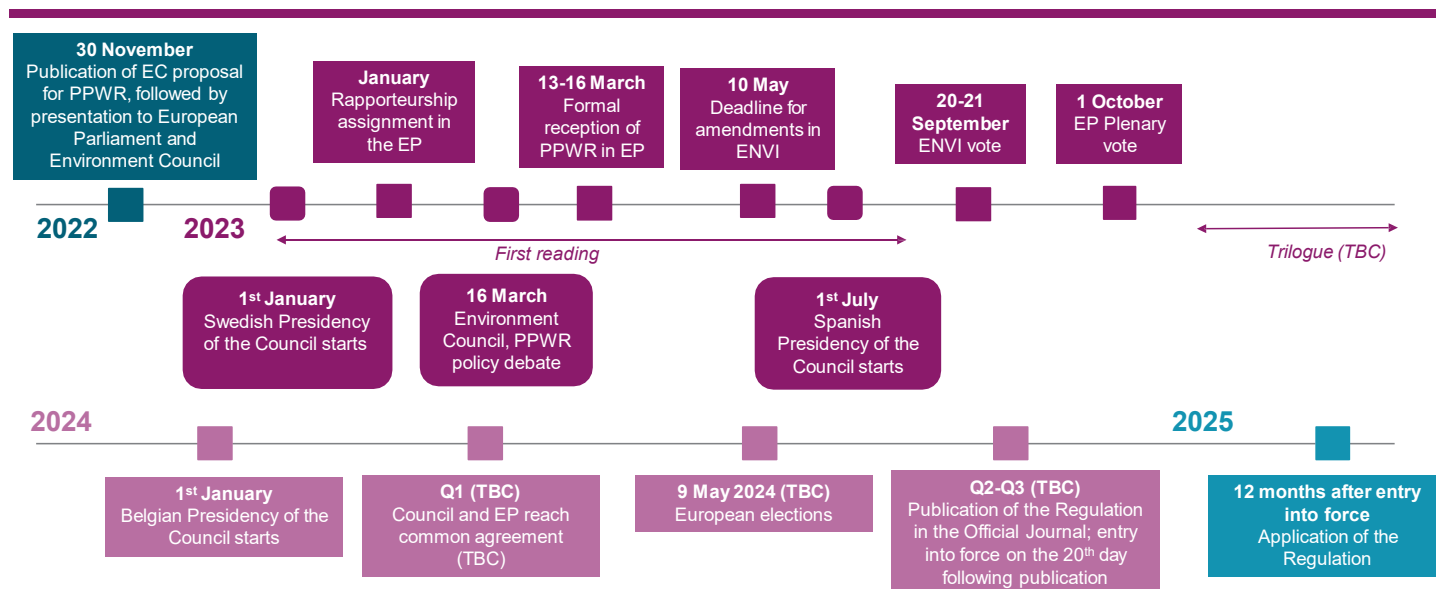




## FINLAND Cont.



### PPWR Co-decision Process Tentative Timeline



- Single-Use Plastics Directive implementation.
- Packaging and Packaging Waste Regulation Initiative.
- Waste Framework Directive Initiative.
- Green Claims Directive Initiative.

#### Single-Use Plastics Directive implementation:

- SUP directive implementation to national legislation.
- National Green Deal to reduce consumption of rigid SUP packaging 2022-26.

- Packaging waste will be collected from 50% of households as from 2023.
- Service packaging to be part of EPR as from 2023 + t/o limit of 1 MEUR will be removed number of producers will increase x10?!
- Cleaning cost of SUP waste from public outdoor areas will be part of EPR as from 2024 (including SUP beverage cups as from 2025).
- Packaging and Packaging Waste Regulation Initiative.





## PPWR CO-DECISION PROCESS - TENTATIVE TIMELINE



- Waste Framework Directive Initiative.
- Textiles will be mad part of EPR.
- Mandatory targets for food waste reduction (10%).
- Green Claims Directive Initiative.



**53%**

53% of green claims give vague, misleading or unfounded information



**40%**

40% of claims have no supporting evidence



**1/2**

Half of all green labels offer weak or non-existent verification



**230**

There are 230 sustainability labels and 100 green energy labels in the EU, with vastly different levels of transparency



## Green Claims Directive

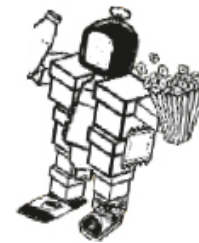
### Key measures

To ensure consumers receive reliable, comparable and verifiable environmental information on products, the proposal includes;

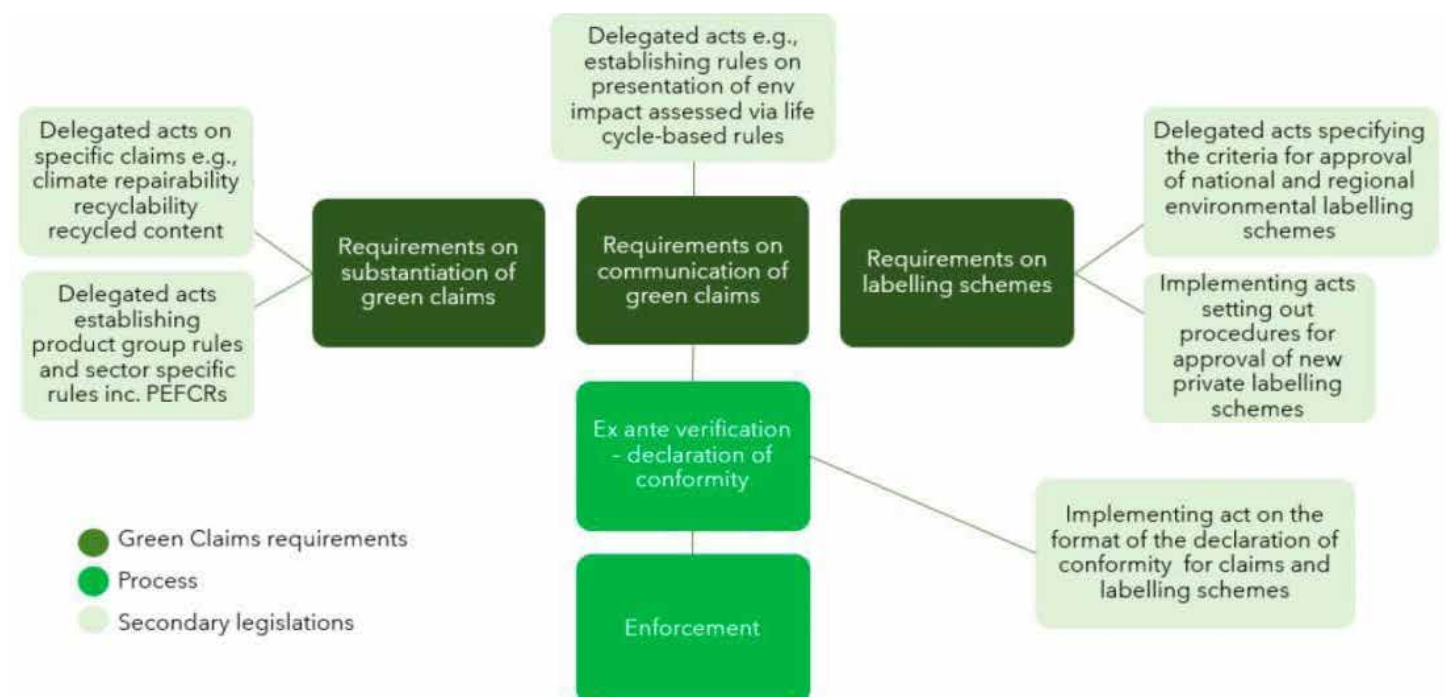
- Clear criteria on how companies should prove their environmental claims and labels.
- Requirements for these claims and labels to be checked by an independent and accredited verifier.
- New rules on governance of environmental labelling schemes to ensure they are solid, transparent and reliable.

The proposal targets **explicit claims** that

- Are made on a voluntary basis by businesses towards consumers.
- Cover the environmental impacts, aspects or performance of a product or the trader itself.
- Are not currently covered by other EU rules.



## EU Commission proposal for regulation of green claims







## AUSTRIA

PACKFORCE AUSTRIA  
das österreichische verpackungsforum

### Recycling and Recovery - Update and current Development

Amendment to the waste management act (AWG) – “**AWG-Novelle Kreislaufwirtschaftspaket**“, issued December 10, 2021.

- Implementation of the Single-Use Plastics (SUP) Directive.
- Framework conditions and specific goals for the expansion of reusable systems for beverage packaging.
  - **From 2024:** reusable systems for beverage packaging in food retail (sales area > 400 m<sup>2</sup>) with a reporting obligation to the packaging coordination office.
  - **From 2025:** single-use deposit (€ 0,25) for plastic bottles and beverage cans between 0,1L and 3L, exceptions for milk → *corresponding regulation in preparation.*
  - Marking of disposable and reusable beverage packaging ('Einweg'/'Mehrweg') on e.g. the storage rack.

Amendment to the packaging regulation (VVO) – “**Verpackungsverordnungs-Novelle 2021**“, issued December 29, 20212

- **Eco-modulation by 2023** → *implementation in preparation.*
- **From July 3, 2024:** single-use plastic beverage containers may only be placed on the market if their plastic closures and lids remain attached to the containers.
- **From 2030 onwards:** only plastic packaging that can either be reused or recycled may be placed on the market.
- **New reporting obligations** from 2022 for reusable packaging, single-use plastic products and sales packaging as well as recycled content in PET beverage bottles (reporting obligation from 2023) or in all plastic beverage bottles (reporting obligation from 2028).

### Other Amendments by 2023

- Uniform collection of plastic packaging throughout Austria in yellow bin/bag.
- Joint collection of light packaging and metals is admissible mandatory from 2025 onwards.
- Participation in collection and recovery system for commercial packaging mandatory.

### Own Events focusing on Sustainability and Sustainable Packaging

Packforce Austria launched Packaging Updates - a new series of information events on current and hot topics in packaging in cooperation with Circular Analytics TK GmbH, Packaging Cockpit GmbH, GS1 Austria GmbH and ARA-Altstoff Recycling Austria AG.

### First Packforce Packaging Update No. 1 on 02/03/23

- The event was dedicated to the new draft of the Packaging and Packaging Waste Regulation (PPWR for short), showing its consequences for the industry as well as perspectives and solutions for the next years.
- As well offering opportunities for exchange and networking.

### Own projects focusing on Sustainable Packaging Design and Food Waste

#### Benchmarking project

With Circular Analytics TK GmbH and FH Campus Wien, University of Applied Science Vienna - 'Assessment of the sustainability of dairy product packaging in Germany, Austria and Switzerland'.

#### Project Content and Objectives:

- Evaluation of packaging on the basis of ecological criteria with the method of holistic sustainability assessment.
- Creation of a benchmarking database for the DACH region.
- Evaluation of residual emptiability (to optimise packaging in the direction of food waste reduction).



**Packaging Cockpit Scope**



**MANAGE PACKAGING SPECIFICATIONS**

- Packaging Management Software for global use
- Food and non-food
- All packaging types, components, materials

**DATA INTERFACE TO YOUR SUPPLIERS AND CUSTOMERS**

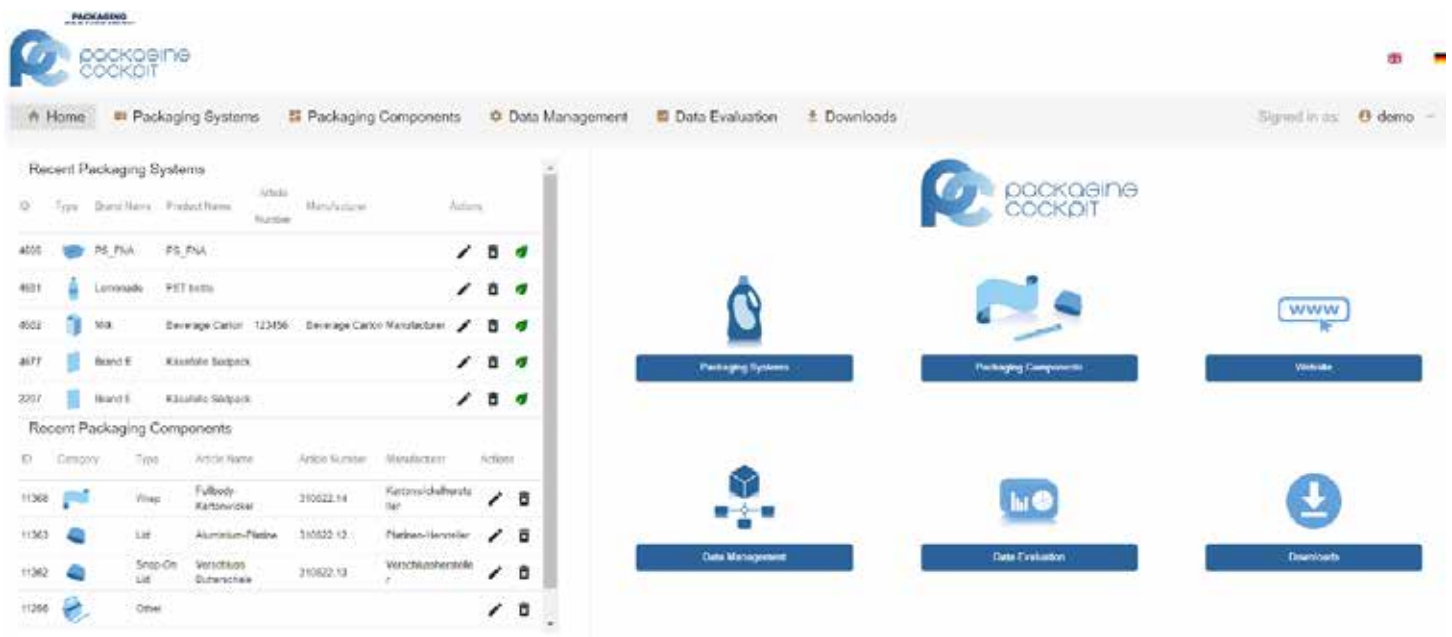
- Data export/ import
- Integration with ERP and CRM
- Authorisation system
- Information Security Concept

**SCIENCE-BASED CALCULATIONS**

- Recyclability
- Recyclate quality
- Life cycle assessment
- Country-specific
- Ongoing updates

**PORTFOLIO ANALYSIS AND REPORTING**

- Recyclability of portfolios
- Life cycle assessment of portfolios
- Total material usage, recyclate contents
- Cost calculations with fees
- Reporting



**Cup** (ID: 4632, Creation Date: 27.8.2022)

Historic Version  
Version 1: 27.8.2022: 11:45:34 (current)

Comment

---

**Product Information**

Brand Name \*  
Fiktivbeispiel

Product Name \*  
Kaffee-Becher

Article Number  
310822.2

GTIN

Flexible / Rigid Packaging \*  
Rigid

**Filling Good Information**

Product Range  
Food

Category  
Dairy products

Product Category  
Mixed milk beverages

Quantity of Filling per Primary Packaging [g]  
250


Volume of Filling per Primary Packaging [ml]  
250

**Manufacturing / Distribution**

Countries of Distribution  
Austria, Germany, Netherlands, United Kingdom, Denmark, Sweden, France, Ireland, Italy, Switzerland

Assembly Country  
Austria

**Materials of the Main Body (excluding Closures and Decorations)**



Manufacturer  
Becherhersteller

Main Body Manufacture Article Number  
310822.21

Country of Manufacturing \*  
France

GTIN

Printing Coverage [%] \*  
0

Length [mm]  
70


Width [mm]  
70

Height [mm]  
150

Total Grammage of Main Body [g/m²]

Total Mass of Main Body [g]  
9,7

Note: Description from outside to inside layer

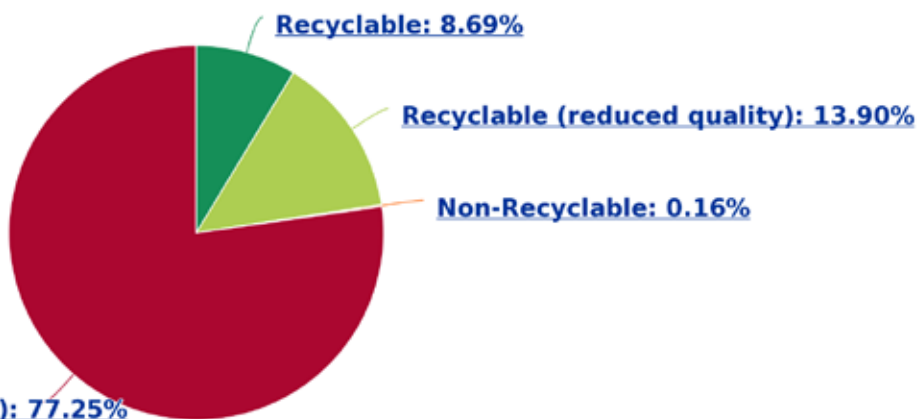
Detection Layer	Function	Material Manifestation	Mass [g]	Color	Action
<input checked="" type="checkbox"/>	Material Layer	PS (General Purpose)	9,7	white, opaque	

[+ Add Material](#)

Recyclable (total): **22.59%**    Non-Recyclable (total): **77.41%**

### Recyclability

● Recyclable ● Recyclable (reduced quality) ● Non-Recyclable ● Non-Recyclable (quality reducing)



**Non-Recyclable (quality reducing): 77.25%**





### Recyclability Overview

- Good Recyclability
- Moderate Recyclability
- Bad Recyclability

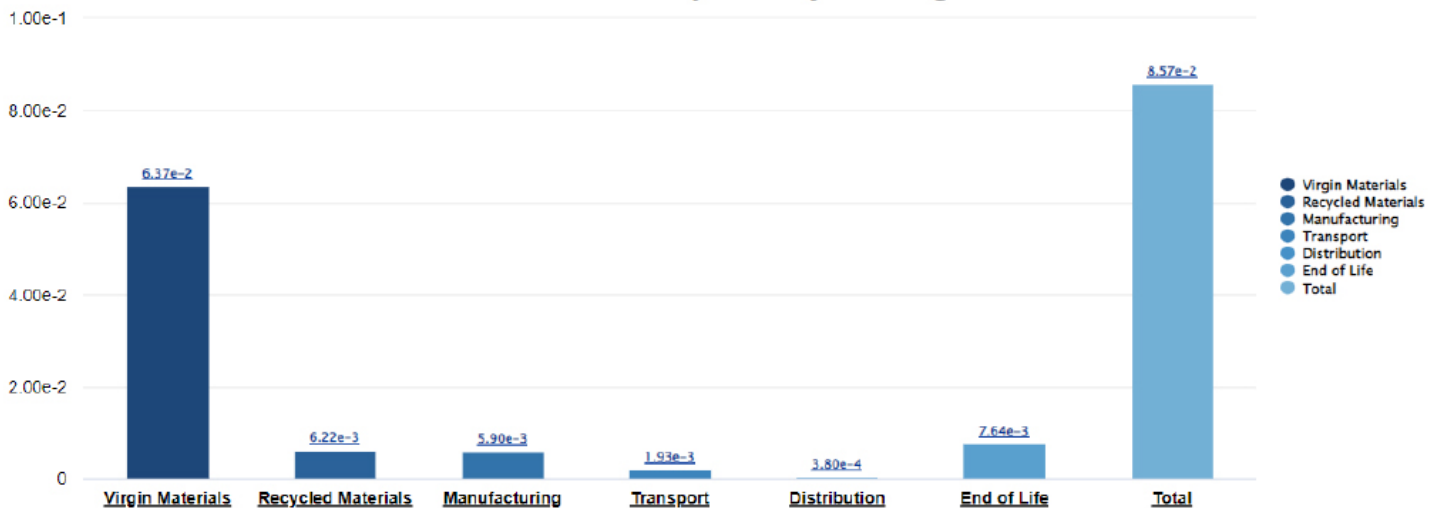


Component	Material	Color	Mass [g]	Rating	Recycling Stream
Main Body (Main Body)	PS (General Purpose)	white, opaque	9.7	<span style="color: black;">●</span> X	Rigid PET stream
Closure (Lid)	Printing Ink	dark colored, opaque	0.027	<span style="color: orange;">●</span> C	Aluminum stream
	Aluminum (Wingnut Alloy)	metallic	1.5	<span style="color: green;">●</span> A	
Closure (Snap-On Lid)	PP	semi-colored, transparent	2.4	<span style="color: lightgreen;">●</span> B	Rigid PET stream
Decoration (Sleeve)	Printing Ink	light-colored, opaque	0.036	<span style="color: red;">●</span> D	Rigid PET stream
	A-PET	colorless, transparent	3.6	<span style="color: red;">●</span> D	

Climate Change: 8.57e-2 kg CO<sub>2</sub> eq

Sum of all greenhouse gas emissions resulting from inputs and outputs. Consequences include increased average global temperatures and regional climatic changes.  
Unit of measurement: Kilogram of Carbon Dioxide equivalent (kg CO<sub>2</sub> eq). All greenhouse gas emissions are compared to the amount of the global warming potential of 1 kg of CO<sub>2</sub>.

### Contributors by Life-Cycle Stage



## Sustainability Country Report Austria/EU November 2023

Packaging Waste Targets, Recycling and regulations

### Amendment to the waste management act (AWG) - 'AWG-Novelle Kreislaufwirtschaftspaket', issued December 10, 2021

Framework conditions and specific goals for the expansion of reusable systems for beverage packaging.

- From 2024: reusable systems for beverage packaging in food retail (sales area > 400 m<sup>2</sup>) with a reporting obligation to the packaging coordination office.
- From 2025: single-use deposit (€ 0,25) for plastic bottles and beverage cans between 0.1L and 3L, exceptions for milk.  
→ corresponding regulation in preparation.

### Amendment to the packaging regulation (VVO) – “Verpackungsverordnungs-Novelle 2021“, issued December 29, 2021

- From July 3, 2024: single-use plastic beverage containers may only be placed on the market if their plastic closures and lids remain attached to the containers.
- From 2030 onwards: only plastic packaging that can either be reused or recycled may be placed on the market. Find more about it: RIS Dokument ([bka.gv.at](http://bka.gv.at)).

## Save Food Packaging Food Loss & Waste

### Action plan “Lebensmittel sind kostbar!” – Food is precious

Launched in 2023, the current program from the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology aims to implement the national strategy as a guide for all actors in the food value chain to actively contribute to achieve national climate and environmental goals.

#### Main goals:

- Reduce avoidable food waste throughout the entire value chain, including originally packaged and partially packaged food.

- Raise awareness through public relations, school projects, and partnerships.
- Make 'Food is precious!' a prominent initiative.
- Support processes for sustainable food waste reduction.
- Help pass on excess food to those in need.
- Recognise outstanding projects across all sectors.

Find more about it: [Lebensmittel sind kostbar!](http://Lebensmittel sind kostbar!) ([bmk.gv.at](http://bmk.gv.at)).



## Working groups

- At a country level, Packforce Austria together with Circular Analytics takes part at many working groups:
- Wein Mehrweg Bouteille: Implementation of reuse system for wine bottles in Austria.
- Fit for 2030: Project to comply with the upcoming PPWR with the focus on packaging minimisation.
- Sustainable Packaging in Circular Economy (SPICE): Lecture, workshops, laboratory and sight visits for Austrian companies along the value chain focusing on packaging.
- Green Food to Go: Lecture, workshops, laboratory and sight visits for Austrian companies along the value chain focusing on food.





- **Benchmarking projects** with Circular Analytics TK Gmbh and FH Campus Wien, University of Applied Science Vienna:
  - 'Benchmarking project to assess the sustainability of cosmetic products' - concluded.
  - 'Benchmarking project to assess the sustainability of milk products'- concluded.
  - 'Benchmarking project to assess the sustainability of beverage products' - ongoing.
- **Project Content and Objectives:**
  - Evaluation of packaging on the basis of **ecological criteria** with the method of **holistic sustainability** assessment.
  - Creation of a **benchmarking database for the region of Germany, Austria and Switzerland.**
  - Evaluation of **residual emptiability.**

### Working groups

- At a global level, Packforce Austria together with Circular Analytics takes part at many working groups.
- 4evergreen: Management of the WS-2 Fibre-based Packaging Design Guidelines.
- Compostable by Design Platform: Management of the WS-2 Compostability Design Guidelines.
- ECR-Community: Development of common standards and Circular Packaging Design Guidelines.
- CEN – TC 261 – SC 4 – WG 10 and 3: Definition of design for recycling criteria (according to PPWR) for plastics and other packaging materials.
- Forum Rezyklat: Member of the Digitalisation data management group – harmonised packaging, master data management.







## Events

### Packforce Packaging Update Nr. 2

- The event held on September 28 followed the new series of information events on current and hot topics in packaging in cooperation with Circular Analytics TK GmbH, Packaging Cockpit GmbH, GS1 Austria GmbH and ARA-Altstoff Recycling Austria AG.

#### Key speakers:

- Manfred Tacker (Circular Analytics): EU PPWR - Latest News.
- Charlotte Werners (Circular Analytics): Benchmarking - Sustainability Comparisons of Packaging types in different markets.
- Alexander Peterlik (GS1): Consistent standardised packaging information.
- Felix Badura (Digi Cycle): Let's sort it out! Digital solutions for consumers.
- Green Packaging Star Awards: 5 packages were honoured with the award at the event.

Find more about it: Packforce Packaging Update Nr. 2.



### Packaging Cockpit

- Web-based information and control system for packaging portfolios.
- Packaging analytics and packaging management tool.
- Fact-based packaging decisions.
- Transparency and information for sustainable development.
- Holistic packaging evaluation, more efficient use of resources.
- Automation of processes in the packaging sector. Fulfilment of information and reporting obligations, legal requirements.
- Business intelligence and reporting.



## Packaging systems

In addition to packaging units, components and materials, the packaging systems level is now available. Packaging systems level is now available on both the start page and in data management.

Figure 1: Homepage - Packaging systems



## Reports

Reports are now available for packaging units and components. These can be individualised and contain both specification data and calculation results.

Figure 2: Packaging unit report





## BELGIUM



### BELGIUM SUP

#### Industry critical of Belgian decree that would restrict numerous single-use plastics

Belgium has plans to limit the sale of several disposable or single-use products while requiring increased use of recycled content in others through a new royal decree. However, the EU Commission appears to have reservations with regard to the legislative project, as the standstill period for the decree has been extended.

After the decree was notified last year, the standstill period was originally due to end on 1 February.

However, the review is now scheduled to run until 30 November. During this period, the decree may not enter into force.



## GERMANY



### Reusable 1 Litre water bottle

Packaging company ALPLA collaborated with German mineral water company TÖNISSTEINER Sprudel to create a reusable PET bottle made of recycled material.

They are perfectly tailored to their sorting, bottling and transport processes and fits in the brand's existing 12-bottle crates for distribution and collection.

According to the press release, laser markings on the bottle indicate the number of refill cycles a bottle has been through, and after it reaches the end of its life span, it is recycled by ALPLA.







## ITALY



- Versalis starts construction of chemical recycling plan in Italy
- Versalis, the chemical branch of Italy-based oil giant Eni, announced it has started construction of a demonstration plant for its proprietary chemical recycling technology, Hoop.
- The plant is located in Mantua, a city in the northern Italian region of Lombardy, and will have a capacity to process 6,000 tonnes of mixed plastic waste per year. It is expected to start operations in 2024.



## HUNGARY



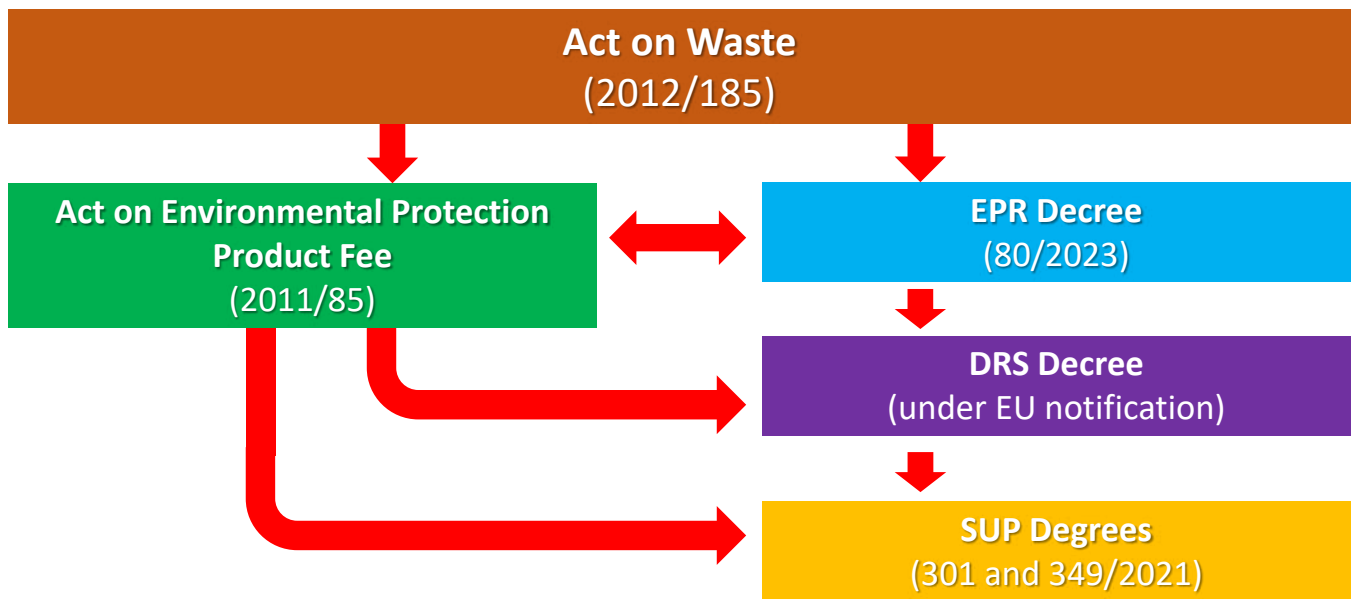
### HUNGARY – Legislative context

#### Industry critical of Belgian decree that would restrict numerous single-use plastics

- In 2021 the Parliament of Hungary adopted the amendments of Act on Waste which contained comprehensive modification of the waste management system.
- The amendments in 2022 included the revision of Act on Environmental Protection Product Charges which provided the former regulation of extended producer responsibility system.
- As a result, the Hungarian waste management system — including the extended producer responsibility system — is going to be radically transformed on July 1, 2023.
- Hungary has brought the waste management activities under the exclusive scope of state responsibility, including residential and industrial-commercial waste system, so especially the waste belongs to extended producer responsibility, and which rights are granted by the state concession contract through MOL Hungarian Oil and Gas PLC for a period of 35 years.
- The extended producer responsibility fees are determined in a state-centralised way by decree, which excludes the possibility of a real market-based fee determination.
- The price determination also excludes the possibility of modulation because for all the producers for same range of products the payment obligation of environmental protection product charge reduced by extended producer responsibility fee remains.

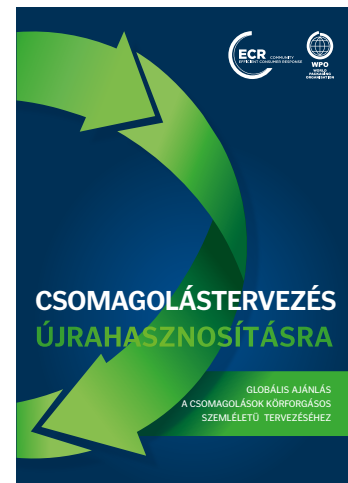


 **HUNGARY Cont.**



**HUNGARY – CSAOSZ activity**

- CSAOSZ – Hungarian Packaging Association has become a knowledge centre of the sustainability in packaging.
- CSAOSZ is a member of several international professional organisations (WPO, EPIC, CEPI, FEA, indirectly Business Europe) and tries to use the wide knowledge gained there in its daily work.
- CSAOSZ gets a lot of invitation to take presentations about the European and Hungarian environmental and packaging relating legislations.
- Secretary General of CSAOSZ is a lecturer at University of Obuda Faculty of Packaging Engineering.
- CSAOSZ has translated the Packaging Design for Recycling Study published by WPO.
- CSAOSZ organises annual conferences, workshops (e.g. International Logistics Day) and trainings to interpret (explain) the relevant European and Hungarian legislations concerned packaging.
- As a result of the professional activity, CSAOSZ is one of the most prestigious associations in the topics of environmental protection, sustainability and recycling of packaging.



 HUNGARY Cont.

- Ministries and other authorities regularly consult with CSAOSZ asking for its professional opinion.
- CSAOSZ successfully organises the HUNGAROPACK Student Award, this year we got 91(!) entries from students of seven universities.
- In 2023 CSAOSZ organises the 40th HUNGAROPACK – Hungarian Packaging Contest.
- Packaging Yearbook – published by CSAOSZ - is the most prestigious packaging edition in Hungary.



POLAND



Poland has adopted the draft legislation for implementing the Deposit Return System by 2025 and is thus on the path to joining 13 other EU countries that have launched Deposit Return Schemes (DRS) so far.

The aim is to increase collection and recycling rates of single-use beverage containers and reusable glass bottles (the municipal recycling rate was 40.3% in 2021).

The Deposit Return Scheme is one of the most effective tools countries are adopting to meet the European goals for reducing the impact of plastic waste on the environment.

However, the schedule for DRS implementation in Poland is tight, and Polish industry associations and non- governmental organisations have doubts about the feasibility of launching the system as originally scheduled in early 2025.





## LATVIA

### Circular & Sustainable Packaging Design LATVIA

- LATVIAN translation of the recommendations. **PACKAGING DESIGN FOR RECYCLING.**
- Translated via direct translation method.
- Difficulty of finding corresponding terms in Latvian language for packaging terminology in the Glossary.
- 3 months work.
- Official opening of the Recommendations at the Packaging Industry Conference 13.04.2023.



- Packaging Industry Conference **SUSTAINABLE PACKAGING: FROM DESIGN TO RECYCLING (13.04.2023. Jelgavacity)**
- Organised by Green Dot of Latvia in cooperation with Packaging Association of Latvia and Latvia University of Life Sciences and Technologies.
- ~150 participants (packaging industry specialists) registered within 1 week.
- 10 speakers – Latvian and international packaging industry experts including:
  - Nerida Kelton, WPO Vice President of Sustainability and Save Food.
  - Dr. Johannes Bergmair, WPO General Secretary.
  - Iveta Krauja, Chairperson of the Board of Packaging Association of Latvia.



 **LATVIA Cont.**

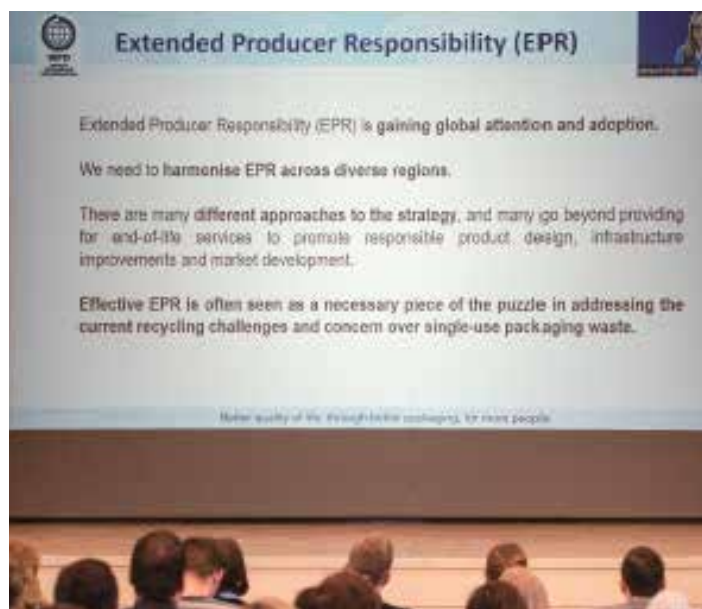
Main topics:

- How Packaging can Support a Sustainability Society?
- Future of Packaging with Sustainable Society and Circular Economy.
- Is a Plast-free Society Possible.
- Research and Analysis of Plastic Packaging in the Latvian Market.
- Greenwashing: Problems and Recommendations.

*Dr. J Bergmair's* visit to Packaging Testing Laboratory in Technology and Knowledge Transfer Department (TEPEK) at Latvia University of Life Sciences and Technologies (13.04.2023. Jelgava city).

Essential investment in research and development of Save Food packaging issues.

Systematical identification and research expertise for product and packaging development lead by Prof. Dr. Sandra Muižniece-Brasava, Corresponding Member of Latvian Academy of Sciences, Head of TEPEK.





 **LATVIA Cont.**

- Dr. J. Bergmair's interview with LETA – national information agency, leading news agency in Latvia, one of the most innovative companies in the Baltics and Europe (13.04.2023. Riga).
- Main topics:
  - Share of packaging in overall waste in Europe
  - Proposal for Packaging and Packaging Waste Directive.
  - Packaging trends observed in the industry today.
  - Impact on the packaging has been left by development of e-commerce.



**“ If combinations of packaging materials are used that are truly non-recyclable, they will disappear after 2035. ”**

- Dr. J. Bergmair's visit to PET Baltija, one of the largest PET bottle recycling companies in Northern Europe (14.04.2023. Jelgava city).
- ~9% local packaging waste – clean from Latvia Deposit system (started 01.02.2022), remaining 90% is imported waste (mainly dirty).
- Great example of commitment to sustainability, circular economy and recycling efforts.
- Close collaboration between packaging producers, recyclers and consumers boosts circular economy and reduces plastic waste.





 **LATVIA Cont.**

- Dr. J. Bergmair's visit to Amber Latvijas balzams – a leading producer of alcohol beverages in the Baltics (14.04.2023. Riga).
- Globally-known brand **Riga Black Balsam®** – one of the oldest alcohol brands in Europe – its beginnings can be found in 1752, winner of significant international awards.
- Packaging of Amber Latvijas balzams – winner of **WorldStar for Packaging 1998, 2000 & 2016**.
- Company chooses environmentally friendly technologies and packaging, mainly glass bottles.





## SLOVAKIA



The first V4 country to adopt a Deposit Return System in 2022, Slovakia, has collected 1.3 billion single-use plastic bottles and cans (recent data from 30.6.2023) since the launch of DRS. This number represents 77% of plastic bottles being returned to the system.

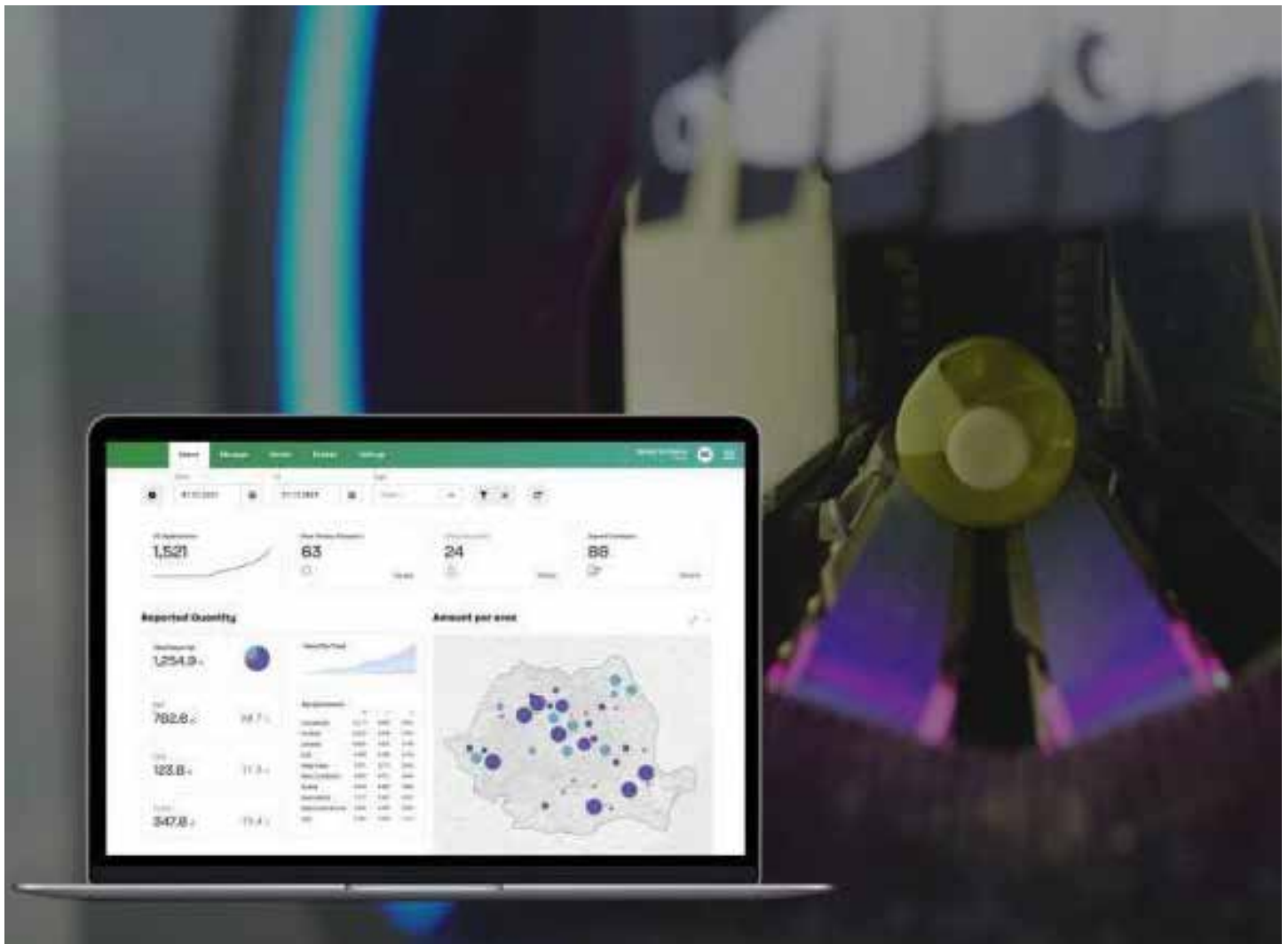
The goal of the country is to return 80% of plastic bottles by the end of 2023. The Deposit Return System in Slovakia processes on average 3,2 million returns per day, seasonally this number is near to 5 million returns per day.

The DRS system, implemented in only 10 months by company Sensoneo, works as a backbone of the entire system as it integrates all stakeholders and gathers data from all sources within the process chain.

The Slovakian container deposit scheme for PET bottles and cans has been in operation in Slovakia for more than a year and a half, and according to a July survey by the Ipsos Slovakia agency, the vast majority of the local population (93%) perceive its introduction as the right step.

A deposit of 15 euro cents (about CZK 3.6) is enough to motivate 80% of them to return the used containers to a collection point.

According to the experience of the respondents, the system has helped to reduce the amount of discarded plastic bottles and cans in nature and minimise littering.





## ISRAEL

המכון הישראלי לאריזה  
The Israeli Packaging Institute  
المعهد الإسرائيلي للتغليف



- Israel environmental arena:
  - MFA-material flow analysis of Aluminium, PP and HDPE.
  - Reusable packaging.
- Unido project - Provision services relating to the circular economy pilots in the plastic chain value:
  - Recycling sleeved pp cups.
  - Recycling sleeved PET bottles.
- Waste strategy –ministry of environment:
- Move from 80% landfill in 2020 to 20% landfill in 2030 and to full circularity in 2050.

### Education

- Yearly Conference.
- Seminar on regulation and implementing eco-friendlier packaging.
- Creative thinking course with focus on sustainability.
- Packaging award for sustainability.

### Recycling

- Order of new sorting technologies.
- Sorting according to colours.
- Sorting flexibles.
- Sorting PS trials.
- Upcycling-Adsorption of odours.
- Circular economy-closing the loop –projects of using recycled materials. Recycled stretch.



## UNITED KINGDOM

I.M3

### ALL WRAPPED UP IN TERMINOLOGY

#### How best to communicate Plastic Bags and Wrapping to citizens

This document provides the supporting evidence and analysis for the use and adoption of ‘Plastic bags and wrapping’ being the accepted overarching terminology for film and flexible material when communicating with citizens.



### 14 tonnes of compostable packaging – on trial! What’s in the composting trial?

- Over 7.3 million tea bags provided by Ekaterra brands PG Tips and Pukka, and Biome Bioplastics.
- Over 23,000 coffee pods by Blue Goose Coffee and The Green Ring using Futamura’s NatureFlex material and PLA.
- 6 tonnes of used Vegware containers, cups and cutlery, from Recorra’s waste collections at catered offices in London.
- 25,000 caddy liners made from Novamont’s Mater-Bi.
- 9 pallets of compostable bags by Tipa for Le Col.
- 9 million sweet wrappers, aka 2.4 tonnes of NatureFlex cellulose film made by Futamura.
- <https://compostableuk.info/14-tonnes-of-compostable-packaging-on-trial/>





### Update on Extended Producer Responsibility Changes in the UK

Under the proposed EPR plans, to be phased in from 2023, businesses placing certain types of products on the market will be required to pay the full costs associated with the product **throughout its lifecycle**. Previously, the burden of such costs was borne wholly or in part by local government.

It is intended that the requirements will be introduced from 2023 and the Act has given the Secretary of State powers to introduce certain measures. These requirements are contained in Part 3 of the Act, which sets out the requirements on producers and national authorities.

The resulting regulations are likely to contain the following provisions:

- The requirement for producers of certain goods to pay a fee and register with a compliance scheme, gaining a certificate of registration as proof.
- The requirement for producers to keep track of the quantities of goods in relevant EPR categories they place on the UK market, and report this to a government appointed compliance scheme.
- Increased regulation of disposal and take-back schemes for a wider range of products.



### An overview of packaging waste reform

In the 2018 Resources and Waste Strategy for England, government committed to the implementation of:

<b>Plastic Packaging Tax</b>	<b>Extended Producer Responsibility</b>	<b>Deposit Return Schemes</b>	<b>Consistent recycling collections</b>
<ul style="list-style-type: none"> <li>✓ £200/tonne tax on plastic packaging with &lt;30% recycled content</li> <li>✓ Applies to new and imported plastic packaging</li> </ul>	<ul style="list-style-type: none"> <li>✓ Fees based on recyclability</li> <li>✓ A single point of liability (brands)</li> <li>✓ Central Scheme administrator</li> </ul>	<ul style="list-style-type: none"> <li>✓ Consumer incentive to recycle drinks containers via deposit on in-scope containers</li> </ul>	<ul style="list-style-type: none"> <li>✓ Mandated collection of flexible plastics added by 2027</li> <li>✓ Aims to increase consistency of kerbside recycling collections across the UK</li> </ul>

The Flexible Plastic Fund was established with the ultimate ambition for all forms of flexible plastic to be collected for recycling at the kerbside in the future.

In the UK Flexible plastics are set to be introduced to kerbside collections by 2027.



Source: Ecosurety



### Plastic wrapper recycling collection trial starts

More than 4,000 homes on a group of streets in Reading can throw away wrapping including crisp packets, cling film and all plastic bags. It is also due to be introduced to homes in Wokingham and Bracknell.

The plastic rubbish will be recycled by re3, the recycling company in charge of waste in Reading, Wokingham and Bracknell Forest.

Residents have to bag the rubbish in specially provided blue bags which is collected as part of their normal recycling collection.

The trial will run until March 2025 and is expected to expand across the town.



**Mura Technology** has opened the world's first commercial-scale HydroPRS advanced plastic recycling plant in Teesside, UK, which builds on 16 years of technology development by Australian company Licella into its Catalytic Hydrothermal Reactor (Cat-HTR) platform.

Mura's facility opened last week with key representatives from the advanced recycling and plastic manufacturing value chains in attendance. The event marked the start of commissioning, with the first recycled hydrocarbon products expected to be delivered to Mura's offtake partners in early 2024.

The purpose-built facility at the Wilton International industrial site will process flexible and rigid mixed plastics, including films, that are currently considered 'unrecyclable'.

The site has capacity to produce 20kt per annum of recycled liquid hydrocarbon products, with scope to expand production capacity to over three times this initial size.

Ahead of the impending ban on Expanded Polystyrene (EPS) food containers in the UK from 1 October, Klöckner Pentaplast (kp) has confirmed that the conversion of its St. Helens site to fully recyclable Expanded Polypropylene (EPP) is complete.

kp Infinity® is fully recyclable and marked with consumer 'Recycle Me' messaging on packs and trays. Crucially, kp Infinity® is exempt from the impending EPS ban and is now available through wholesalers and distributors, creating a seamless like-for-like switch for food service businesses.

The kp Infinity® range has undergone extensive testing and trialling in today's recycling infrastructure with RECOUP, the UK's leading authority on plastics waste and resource management.





 **UNITED KINGDOM Cont.**

**I.M3**

**UK Refill Coalition launches at Aldi**

UK Refill Coalition Launches First In-store Trial at Aldi to Reduce Single-Use Plastic Waste: Innovative Refill Solution Transforms the Way Consumers Shop.

- The UK Refill Coalition, consisting of Aldi UK, Ocado Retail, and CHEP, aims to combat single-use plastic packaging waste.
- The coalition are launching a pilot program at Aldi UK’s Solihull store to test a new refill solution for key food staples and household products.



**UK Refill Coalition**

If each household in the UK refilled just one item per week, over 1.4 billion items of single-use packaging could be eliminated annually.

This solution involves reusable bulk vessels for products like cereals and pasta, as well as cleaning and personal care items. By removing single-use plastic packaging from the supply chain, this system increases efficiency and reduces costs. Customers simply need to bring their own containers.



**UK Coffee Pods**

Over one million UK households are now able to recycle used coffee pods at kerbside through Podback’s recycling scheme, the company claims, with the London Borough of Havering becoming its latest partner and East Ayrshire its first Scottish partner within the last month.

Podback says that 1,078,600 households across sixteen local authorities in the UK can now dispose of their aluminium and plastic coffee pods alongside other household waste and recycling in kerbside recycling.

Podback’s reprocessing partners handle all collected coffee pods within the UK. The aluminium pods are used to manufacture beverage cans and other new metal products, while their plastic alternatives become supermarket crates, furniture, and other plastic items. The used coffee grounds enter anaerobic digestion to produce biogas and soil improver.





 UNITED KINGDOM Cont.

I.M3

British households waste 490 million pints of milk each year, often because the milk has passed its use-by date.

Sainsbury's are helping customers reduce food waste by switching from 'use-by' dates to 'best-before' dates on our own-brand milk range, preventing them from pouring away pints that are still safe to consume.

The change will apply to 730 million pints sold annually, making Sainsbury's the biggest UK retailer to make this change.

They also recently completed the roll-out of clear caps across all own-brand milk bottles to improve packaging recyclability.

Sainsbury's introduces new crownless pineapples in bid to reduce waste.

The crown of a pineapple is typically thrown away by customers at home, so by removing it for recycling during the production process, Sainsbury's is helping customers to cut down on food-related waste.

The removed crowns will either be replanted in the pineapple fields or shredded and given to local farmers to be used for animal feed, reducing waste by 700 tonnes annually.

By removing the crown during production, Sainsbury's can fit more of the product into each box it ships to stores, resulting in a reduction of 2,500 boxes transported per year.

# Spoiler Alert!

**We're switching from use-by to best-before on our milk range to reduce household food waste.**



Sainsbury's





**IRELAND**



**Container Deposit Scheme**

Ireland's new Deposit Return Scheme Re-turn will go live on 1 February 2024. All Producers operating in the Irish market who produce/import and sell 'in scope' drinks containers, have a key role to play in the new Deposit Return Scheme.



**SCOTLAND**

**Morrisons supermarket launches new recycling plant for hard-to-recycle soft plastics in Scotland**

A new recycling site for hard-to-recycle soft plastics – co-owned by supermarket chain Morrisons and operated by Yes Recycling– has

opened in Scotland with the aim of preventing end-of-life plastics from being exported overseas and repurposing an annual 15,000 tonnes of post-consumer packaging at full capacity.



**WALES**

- The majority of householders in Wales separate their dry recyclables into three separate containers and 99% of households have a separate weekly food waste collection.
- Wales has been rated by Eunomia as third in the World on its household waste recycling rate. WRAP's recycling tracker survey shows that the recycling and general rubbish service is rated higher by people in Wales than in the UK overall.
- The satisfaction with the number of separate containers needed to sort recycling for collection is also higher in Wales than the rest of the UK. Next year (6 April) all workplaces in Wales will be required to separate out their recyclables for collection- three streams for dry recyclables, and another stream for food waste.

Q. Please rate your recycling and waste collection on a scale from 0-10 on the following aspects. Base: 1,041 adults in Wales with responsibility for dealing with the rubbish and recycling, Nov 2022





## UNITED STATES OF AMERICA



### US Plastic Pact Report

The US Plastics Pact is proud to release our Annual Report, publishing aggregated data from our member organisations (Activators) in 2021. The US Pact's consumer packaged goods, retailer, and converter Activators produce 37% of plastic packaging in scope in the US by weight, placing 5.9M tons of plastic packaging on the market. Since its launch in August 2020 the US Pact has doubled membership, interest, and impact with more than 120 businesses, not-for-profit organisations, government agencies, and research institutions addressing four targets to address plastic waste at its source by 2025.



### Guidance for Reusable Packaging

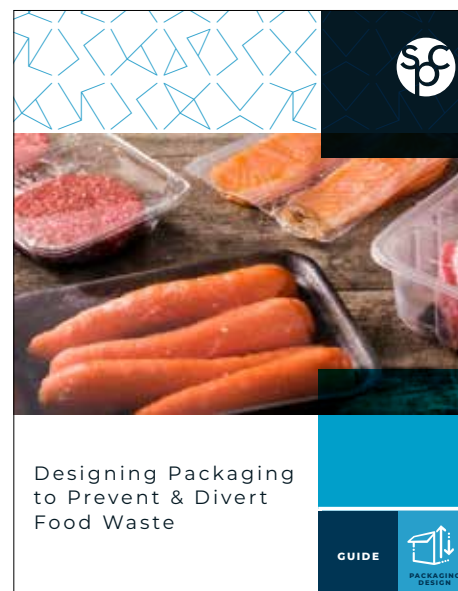
Understanding goals and assumptions in order to design a more successful reusable packaging program.

The Sustainable Packaging Coalition decided to formulate considerations for the success, applicability, and sustainability of reusable packaging systems.



Sustainable Packaging Coalition (SPC) have released a new report Best Practices for designing packaging to prevent and divert food waste.

This guide aims to explore the specific role that packaging can play in both causing and preventing food waste, and provide actionable solutions for using packaging as a tool to reduce and prevent food waste in retail and in consumers' homes.







UNITED STATES OF AMERICA Cont.



Container Deposit Scheme



The Ameripen newly released study, *Economic Impact of State Recycling Market Development Programs: 1990- 2023*.

The in-depth research sheds light on three decades of state recycling initiatives, revealing the cumulative impact on jobs, payroll, and total economic value.

The data suggested that recycling market centres generated nearly 260,000 full-time equivalent jobs over the past 33 years, paying out collective wages and benefits totalling \$22.2 billion, and also generated economic activity of over \$89.5 billion.



EPA Unveils Game-Changing Insights on Food Waste

New reports confirm prevention is the best solution for food waste

The new scale adds some categories (e.g. sending food down the drain to wastewater, which is ranked among the least preferable) and reorganises others, including elevating the ranking of composting.



Wasted Food Scale

How to reduce the environmental impacts of wasted food





## CANADA

### Canada's single-use plastic ban takes effect on 20 December 2022.

Starting Tuesday, Canada will ban the manufacture and import for sale of single-use plastics in an effort to achieve zero plastic waste by 2030, according to Environment and Climate Change Canada.

The ban covers single-use plastics including checkout bags, cutlery, food service ware, ring carriers, stir sticks and straws, the federal government stated in a news release published on June 20.

While the ban on the manufacture and import of single-use plastics will come into effect Tuesday, the sale of these items will be prohibited as of December 2023 to “allow businesses in Canada enough time to transition and to deplete their existing stocks,” according to the government’s website.



## LAGOS

### Recycling

Recently, the Lagos Waste Management Authority, LAWMA, launched the Blue Box programme, aimed at promoting the culture of waste sorting at the point of generation. The launch of the innovative scheme represents a milestone in waste management in Lagos.



It has been discovered that the existing practice of dropping all wastes in one container had become old-fashioned, necessitating the need to replace it with a modern method, which involves keeping two containers at home: one for recyclable waste and the other for general waste.





KENYA



## YieldWise Strategy at Zero Loss Centers for Mangos

### Technologies for Loss Reduction

- Storage, handling processing, shelf-life extension technologies
- Context-appropriate, accessible, affordable

### Organization of Farmers in Groups

- Joint ownership of technologies
- Produce aggregation
- Better market access - quantities, quality, consistency can be realized
- Better bargaining power
- Group access to credit to improve their operations

### Capacity Building

- Good postharvest handling practices
- Small-scale processing
- Technology know-how
- Record keeping and agribusiness skills

## Commitments/Targets to Reduce FLW



**SDG 12.3:** Halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains including postharvest losses by **2030**



**Malabo Declaration, 2014:** Commitment to ending hunger in Africa by 2025. **Commitment 3b:** Halve the current (2014) levels of Post-Harvest Losses, by **2025**



**Big Four Agenda** - Reduce postharvest losses to 15% by 2022 as part of the government's big 4 agenda (Food Security Pillar)



## Conceptual Framework of African Union Post-Harvest Loss Management Strategy

### ❑ VISION

- Contribute to enhanced food and nutrition security at the Member States level through reduced post-harvest losses including horticultural crops, livestock and fisheries products

### ❑ GOAL

- Halve (decrease by 50%) the current levels of Post-Harvest Losses (PHL), by the year 2025 from the year 2015

### ❑ OVERALL OBJECTIVE

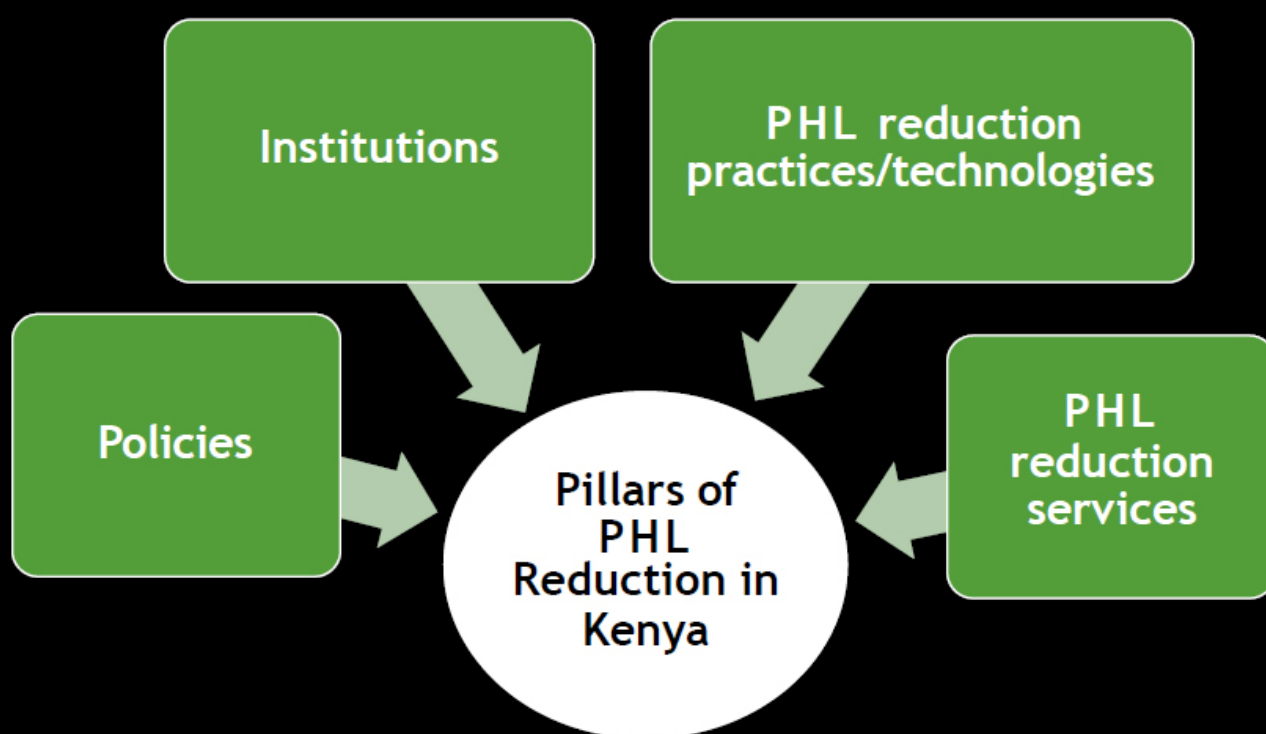
- Effectively guide and coordinate post-harvest loss initiatives at the regional and national levels towards achieving reduced postharvest losses in line with the Malabo Declaration and SDG targets.

### ❑ STRATEGIC OBJECTIVES

- Strengthen policy, awareness and institutional capacity in post-harvest loss management
- Promote knowledge management, data, skills and human development in post-harvest loss management
- Promote technological advancements that are environmentally friendly, effective markets and market infrastructure to support post-harvest loss management
- Promote good governance in macro-economic conditions for cost effective financing & investment in postharvest management



## Strategic issues/pillars identified as key for Kenya





**Reducing FLW is a shared responsibility by all**

- Governments and Policy makers
- Private sector
- Development partners
- Civil society
- Research and academia
- Consumers

**Stop Food Loss and Waste  
For the People  
For the Planet**

**KENYA PLASTIC PACT/7TH AFRICA ANNUAL CIRCULAR ECONOMY CONFERENCE NAIROBI**





**SUGAR SYMPOSIUM-SUSTAINABILITY**



**SUGAR SYMPOSIUM-SUSTAINABILITY**





## Material structures Innovations

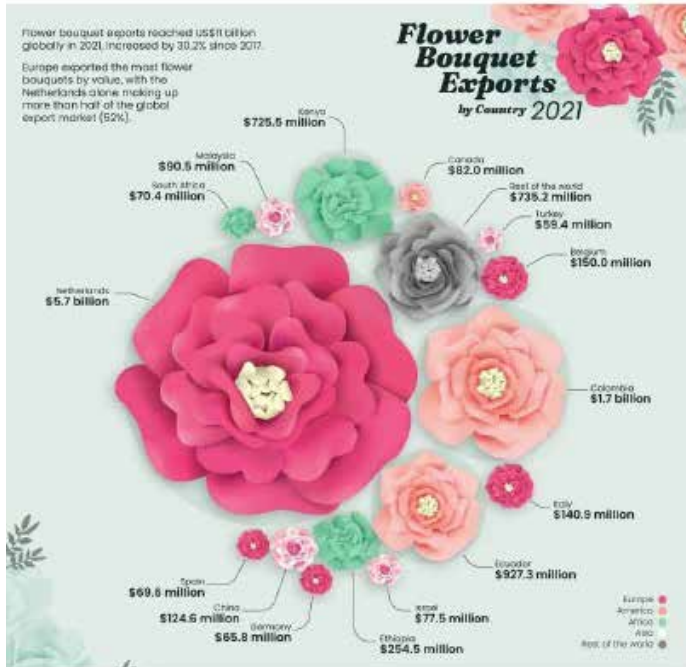
- CURRENT
  - LAMINATES-PET/PE
  - FOSSIL FUEL EXTRACTION
  - EMISSION OF CO2/GREEN HOUSE GASES
  - GLOBAL WARMING
  - CRUCIAL FOR AGRICULTURE
  - GLOBAL PUBLIC PLEDGES 2025/2030/2050
- NEW DEVELOPMENTS
  - MONOSTRUCTRE-PE/BOPP
  - NEED MATERIALS FROM RENEWABLE RESOURCES
  - MONO STRUCTURES EASY TO RECYCLE
  - ENERGY EFFICIENCY
  - LAMINATE INCORPORATION OF PCR UPTO 100 % etc

## MONO STRUCTURE DEVELOPMENTS





### FLOWER EXPORTS FROM KENYA



### MS SOHA AT SUMMIT



### SUSTAINABLE PACKAGING SUMMIT 13TH MARCH 2023 NAIROBI





## PROPAK EAST AFRICA CONFERENCE

- WPO design guidelines for sustainability.
- Presentations.
- Need to translate guidelines into Kiswahili language widely used in East, Central and Park of Southern Africa.



## FOOD LOSS AND WASTE DAY

- Spice Radio Interview.
- KTN TV Interview.
- Newspaper Coverage.
- Marked at University of Nairobi Kenya.
- TShirts and Caps done.





## FLW DAY 29TH SEPT 2023 IN KENYA

- Support to SDG.
- Zero Hunger.
- Food Security.
- In line with Swedish Strategy for Kenya.



## KEY ACTIVITIES/INITIATIVES

- Post Harvest Conference in Ethiopia.
- Post Harvest Policy in Kenya.
- IOPPK put a packaging voice in the above.



**KENYA EPR/PRO LEGAL NOTICE**



**NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY**  
**PUBLIC NOTICE TO ALL PRODUCERS**

As you are aware the Sustainable Waste Management Act became effective on 22nd July 2022. Section 13 of the Act requires every producer to bear mandatory extended producer obligations to reduce pollution and environmental impacts of the products they introduce into the Kenyan market and waste arising therefrom. Every producer shall fulfill their extended producer responsibility obligations individually or collectively in a compliance scheme.

The producer is defined in the Act as an entity that introduces goods, products and packaging into the country using authorized means by manufacturing, importing, converting, filling, refilling, repackaging or rebranding.

The Authority has commenced inspection and enforcement on compliance to this Act. In this regard Producers are requested to submit to the Authority the plan that they are using to implement Extended Producer Responsibility Obligations. You may submit the EPR plan as an individual or collective scheme indicating the following:-

1. The list of products introduced into the Kenyan market.
2. If you are a member of a collective scheme, provide evidence of membership.
3. Estimated annual volume/quantity of product(s) introduced into the market.
4. Mechanisms put in place for identification and tracking of your product(s).
5. List and location of your drop off or collection points per county (see criteria below for establishing a collection point). You can also use existing transfer stations licensed by NEMA.
6. Evidence of payment of recovered materials collection service for each product
7. Planned awareness strategy and activities
8. Workplan per county and budget for fulfilling EPR obligations
9. Contracts with NEMA licensed waste transporters to move recovered products from collection points
10. Collection schedule from collection points
11. Contracts with waste processing facilities such as recyclers, incinerators, landfills.
12. EIA or Summary Project Report (SPR) approvals as advised from the County NEMA office.

**NB: If you are a member of a collective scheme, respond to question 1, 2, 3 and 4 only.**

**Collection point establishment and operation criteria**

A collection point should be established and operated as per the criteria below

1. Should only handle segregated dry items
2. Should be roofed, paved and in a well-drained location
3. Should be manned or secured from external interference
4. Waste should be stored in containers that are covered to avoid littering
5. Similar waste fractions should be placed in the same receptacle
6. Should declare and implement a collection schedule (provide collection contracts with licensed actors)
7. Should be accessible to the public
8. Should provide proof of payment for recovered material collection service
9. Display list of products collected and corresponding payment for collection service.
10. Should declare data on volumes of waste collected and transported away.
11. Should be approved by NEMA through submitting an EIA or Summary Project Report (SPR) as advised from the County NEMA office.

Producers are expected to submit their EPR plan to the Authority within TWO (2) months after publication of this notice to enable commencement of inspection and enforcement action to weed out joyriders.

**DATED: 30TH AUGUST, 2023**

**Director General**  
**National Environment Management Authority,**  
**P.O Box 67839-00200, NAIROBI.**  
Eland House, Popo Road  
Tel : 254-20-2193718, 2101370.  
Mobile : 0724253398, 0723363010, 0735 013046  
Email : dgnema@nema.go.ke



**MINISTRY OF ENVIRONMENT**  
**MANDATORY REGULATIONS 2020**  
**UNDERGOING PUBLIC PARTICIPATION-**  
**ALMOST FINALISED**





# INDUSTRY RESPONSE

DESIGN AND DEVELOP  
PACKAGING FOR A  
CIRCULAR ECONOMY-IOPPK

KENYA PLASTIC ACTION  
PLAN BY KAM

KENYA PLASTICS  
PLASTICS/PACKAGING PACT

## THE GAZETTE NOTICE



GAZETTE NOTICE No. 2356

### THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT

(Cap. 387)

IN EXERCISE of the powers conferred under section 3 and 86 of the Environmental Management and Co-ordination Act, it is notified to the public that the Cabinet Secretary for Environment and Natural Resources has with effect from 6 months from the date of this notice banned the use, manufacture and importation of all plastic bags used for commercial and household packaging defined as follows:

- (a) Carrier bag—  
bag constructed with handles, and with or without gussets;
- (b) Flat bag—  
bag constructed without handles, and with or without gussets.

Dated the 28th February, 2017.

JUDI W. WAKHUNGU,  
Cabinet Secretary for  
Environment and Natural Resources.





### EPR PRO LEGALISED IN KENYA

**NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY**

**PUBLIC NOTICE TO PRODUCERS**

As you are aware, the Kenya Meteorological Department has issued an early warning that the El-Nino phenomena may be experienced in our country from the month of October 2023. They have warned of above average rains which may result in flooding.

In previous flooding incidents, urban areas have experienced clogging of the drainage infrastructure by waste especially from packaging, textiles and diapers among others. This exacerbates the flooding menace leading to loss of life and property. Further, the post-consumer waste degrades our wetland ecosystems such as rivers, lakes, swamps, oceans among others

Section 13 of the Sustainable Waste Management Act, 2022 requires producers to bear mandatory Extended Producer Responsibility obligations to reduce pollution and environmental impacts of the products they introduce to the Kenyan market and waste arising therefrom. In this regard, the producers should ensure that their post-consumer waste does not clog drainage systems, obstruct flow of rivers or cause pollution to the ecosystems.

The purpose of this notice is to require all Producers and associated Producer Responsibility Organizations to remove all post-consumer waste from the environment as a matter of urgency. Cleanliness and quality of the environment should be sustained at all times.

NEMA shall not hesitate to take legal action on any producer whose product or packaging is found littering the environment.

**DATED: 11th September, 2023**

**Director General**  
**National Environment Management Authority,**  
**P.O Box 67839-00200, NAIROBI.**  
**Eland House, Popo Road**  
**Tel : 254-20-2183718, 2101370.**  
**Mobile : 0724253398, 0723363010, 0735 013046**  
**Email : dgnema@nema.go.ke**

Our Environment, Our Life, Our Responsibility  
 @NemaKenya www.nema.go.ke

### KEY ACTIVITIES

1. Speaking forums at PRO.
2. Plastic Pact Events.
3. Circular Conference Participation.
4. Kenya Packaging Summit.

**NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY**

**PUBLIC NOTICE TO ALL PRODUCERS**

As you are aware the Sustainable Waste Management Act became effective on 22nd July 2022. Section 13 of the Act requires every producer to bear mandatory extended producer obligations to reduce pollution and environmental impacts of the products they introduce into the Kenyan market and waste arising therefrom. Every producer shall fulfill their extended producer responsibility obligations individually or collectively in a compliance scheme.

The producer is defined in the Act as an entity that introduces goods, products and packaging into the country using authorized means by manufacturing, importing, converting, filling, refilling, repackaging or rebranding.

The Authority has commenced inspection and enforcement on compliance to this Act. In this regard Producers are requested to submit to the Authority the plan that they are using to implement Extended Producer Responsibility Obligations. You may submit the EPR plan as an individual or collective scheme indicating the following:-

1. The list of products introduced into the Kenyan market.
2. If you are a member of a collective scheme, provide evidence of membership.
3. Estimated annual volume/quantity of product(s) introduced into the market.
4. Mechanisms put in place for identification and tracking of your product(s).
5. List and location of your drop off or collection points per county (see criteria below for establishing a collection point). You can also use existing transfer stations licensed by NEMA.
6. Evidence of payment of recovered materials collection service for each product
7. Planned awareness strategy and activities
8. Workplan per county and budget for fulfilling EPR obligations
9. Contracts with NEMA licensed waste transporters to move recovered products from collection points
10. Collection schedule from collection points
11. Contracts with waste processing facilities such as recyclers, incinerators, landfills.
12. EIA or Summary Project Report (SPR) approvals as advised from the County NEMA office.

**NB: If you are a member of a collective scheme, respond to question 1, 2, 3 and 4 only.**

**Collection point establishment and operation criteria**

A collection point should be established and operated as per the criteria below

1. Should only handle segregated dry items
2. Should be roofed, paved and in a well-drained location
3. Should be manned or secured from external interference
4. Waste should be stored in containers that are covered to avoid littering
5. Similar waste fractions should be placed in the same receptacle
6. Should declare and implement a collection schedule (provide collection contracts with licensed actors)
7. Should be accessible to the public
8. Should provide proof of payment for recovered material collection service
9. Display list of products collected and corresponding payment for collection service.
10. Should declare data on volumes of waste collected and transported away.
11. Should be approved by NEMA through submitting an EIA or Summary Project Report (SPR) as advised from the County NEMA office.

Producers are expected to submit their EPR plan to the Authority within TWO (2) months after publication of this notice to enable commencement of inspection and enforcement action to weed out joyriders.

**DATED: 30TH AUGUST, 2023**

**Director General**  
**National Environment Management Authority,**  
**P.O Box 67839-00200, NAIROBI.**  
**Eland House, Popo Road**  
**Tel : 254-20-2183718, 2101370.**  
**Mobile : 0724253398, 0723363010, 0735 013046**  
**Email : dgnema@nema.go.ke**





## SOUTH AFRICA



### Design-For-Recycling & OPRL Tool:

SAPRO and its partners (Polyco, WWF Nedbank Greentrust, Designed For Earth and the SA Plastics Pact) developed a [Design-for-Recycling tool](#) that indicates the recyclability of a packaging item based on the details provided by the packaging designer.

This is a FREE to use web-based solution that also produces On-Pack Recycling Labels (OPRLs) in an auto-generated recyclability report.



### Packaging Waste Targets, Recycling & Regulations

#### South Africa supports the UN Global Plastics Treaty

- Government – represented by the DFFE.
- Industry – represented by Plastics SA & CAIA.
- Sustainability goals & waste targets contained within DFFE EPR regulations.

#### Plastics Pact

South Africa has a Plastics Pact, driven by GreenCape, a non-profit organisation that drives green economy solutions.



### Extended Producer Responsibility

- EPR regulations became effective from 5 November 2021.
- Multiple different PRO's in the Paper & Packaging Sector.

- Each PRO submits an annual EPR plan to DFFE.
- PRO's have created a PRO Alliance to co-ordinate activities.



### Recycling & Recovery

- Plans & growth targets for collection, separation & recycling facilities - contained within PRO's EPR plans.
- PRO's & Government working together to formalise 'waste pickers'.

- Government are looking at SUPs but no tax or ban on these other than VTCs (retail plastic bags).
- No mandatory Deposit Schemes, premature to introduce at such an early stage of EPR implementation.



 **SOUTH AFRICA Cont.**



**Compostable Plastics Council (COPCO)**

- Recently established & registered as a PRO to promote composting as an EPR solution.
- Working on a verification system for home & industrial compostable materials.
- Working on a certification label to communicate on pack.
- On-Pack Recycling Labelling in SA.
- No mandatory system at this stage.
- Some retailers have introduced their own OPRL system (Woolworths).
- SAPRO's Design for Recycling Tool includes OPRL recommendations.

**Design for Recycling**

- Packaging SA published Design for Recycling Guidelines which were adopted by the DFFE as a national guideline in June 2023 – currently in the process of being updated.
- SAPRO (SA Plastics Recycling Organisation) offers an online design for recycling tool.
- Sustainability considered a key judging criteria in IPSA's Gold Pack & Student Gold Pack Awards.



**Save Food – Food Loss & Waste**

- Driven through SAAFoST (SA Assoc. for Food Science & Technology).
- DFFE – Have a draft Strategy for Reducing Food Losses & Waste prior to retail – final review stage. SAAFoST hold regular workshops & conferences addressing this important topic.
- SA Harvest, Food Forward – organisations making efforts to minimise food waste from retailers onwards.
- 'Save Food' on agenda of IPSA conferences & also an award category in Gold Pack Awards & considered in Student Gold Pack Awards.

**IPSA Key Themes 2023**

**IPSA's conferences, workshops, webinars & masterclasses focused on:**

- Understanding EPR.
- Sustainability initiatives.
- Food Labelling Legislation.
- Understanding the role of PRO's.
- Responsible Packaging.







## BRAZIL



### Brazil to see mandatory Sustainability reporting by 2026

Public companies in Brazil will be required to provide annual sustainability and climate-related disclosures, starting in 2026, according to a new announcement from Brazil's Securities and Exchange Commission (CVM) and Ministry of Finance.

According to the CVM, the new reporting requirements will be based on the recently published sustainability and climate-related disclosure standards issued by the IFRS Foundation's International Sustainability Standards Board (ISSB).

The ISSB was launched in November 2021 at the COP26 climate conference, with the goal to develop IFRS Sustainability Disclosure Standards, driven by demand from investors, companies, governments and regulators to provide a global baseline of disclosure requirements enabling a consistent understanding of the effect of sustainability risks and opportunities on companies' prospects.



### Canvas Positive Packaging

The tool simply ties together several relevant metrics for sustainability self-evaluation (environmental) of packaging systems:

- **Quickly** – analysis in less than 15 minutes.
- From **multiple aspects** relevant to the packaging industry.
- Allowing to **simulate different scenarios** (different levels of reuse, or refill or recycling).
- With the possibility of **data customisation**.
- Including **visual tool** to assist with analysis and communication of results.



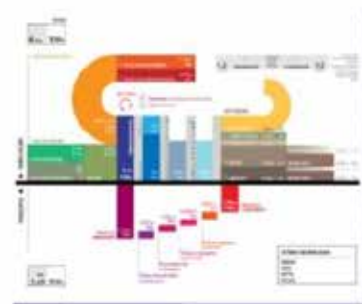
## CANVAS DA EMBALAGEM POSITIVA

### Tool Structure

It starts with a sketch of the different packaging systems and ends in a summary table of metrics



1. Excel tool starting with a draft of the packaging system and ending with metrics, with full transparency of data and calculations



2. Graph for visualizing results generated by proprietary online tool



ABRE and Industry launch Lupinha FOR Recycling



Expanded information platform,  
at consumers' hands,  
For conscious consumption



Scan the QR code and meet Lupinha!  
Real application

**Circularity!**

Clear information:

- i. about the product itself
- ii. On how to discard packaging for recycling\* or how to reuse it!



\*Prepared by recycling cooperatives





## INDIA



### Mumbai PET Collection

#### Coca-Cola and Zepto to Collect, Recycle PET Bottles in Mumbai

In the 'return and recycle' initiative, consumers can access the 'Return PET Bottles' feature on the Zepto app, where they can opt to return up to four empty PET bottles across any brand. The bottles will then be collected by Zepto riders during delivery.



### India Plastics Pact Insights Report

India Plastics Pact Secretariat surveyed about 600 recycling units between December 2022 and February 2023 and have released a report.

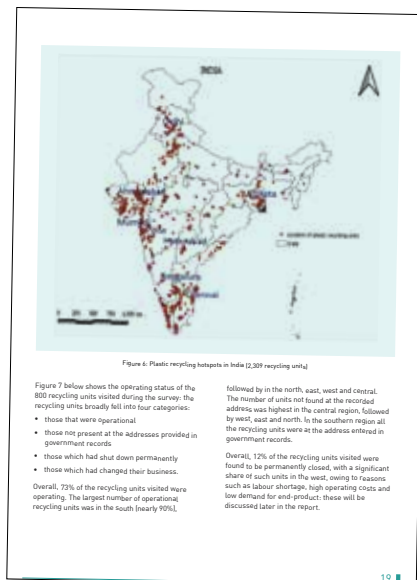
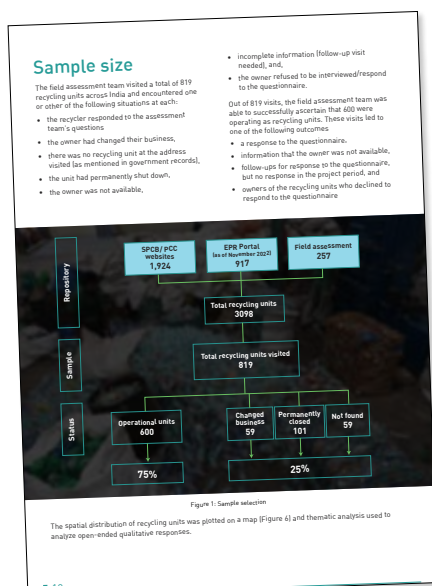
Main Findings from the report are that:

- Polyolefin recycling units make up two-thirds of recycling units (by number) in India.
- Less than 5% of installed capacity is for closed-loop recycling.
- Recycling units are unevenly distributed over the country; few recycling units are located in the eastern and central regions.
- A large proportion of recyclate is used for low-value applications and
- Installed capacity appears to be under-utilised at most locations.

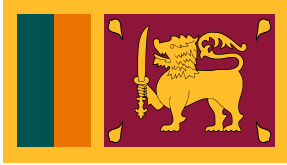
**INDIA PLASTICS PACT**

Insights report  
**Landscape assessment of plastic recycling in India**

Managed by: CII (Confederation of Indian Industry)  
Supported by: CEIRI Centre of Excellence for Sustainable Development, wrap  
Funded by: [Logo]







SRI LANKA



Coca-Cola in Sri Lanka is proud to introduce our all-new Large Returnable Glass Bottles (LRGB) named the 'Big Buddy Pack' with a new design and a refreshed look to enhance the experience of our consumers and provide an affordable option! The new Big Buddy Bottle is positioned to be both good for the Pocket as well as the Planet.

As a total beverage company, Coca-Cola is providing more choices to consumers when selecting the type and size of packaging to suit their lifestyle and occasion.

This will be the perfect companion for friends and families to enjoy during meals as it provides up to 04 glasses of refreshing Coke, Fanta or Sprite, which will be immediately available in the Western Province and other regions thereafter.



Economic Background of 2022

- The year began with an economic crisis for Sri Lanka.
- There were shortages of basic commodities & all petroleum products.
- There were significant power shortages due to drought foreign exchange shortage for fuel purchases.
- Economy recorded a negative growth or contraction of 8%.
- Food inflation recorded >80%
- Interest rates increased to 28-30%
- LKR currency depreciated by 80%.
- But all these indicators have been improved to a positive level by Jan 2023.
- Inflation is below 40%,
- Interest rates are below 20% .
- LKR appreciated by 20%.
- It's important to note that even with the most difficult year after independence the focus on Sustainability/Food security had been observed.



**SRI LANKA Cont.**

**Circular and Sustainable Packaging Design – training, workshops other programs**

We have our annual Packaging congress & for 3 consecutive years our theme was Sustainable Packaging for Economic growth. We conduct this for the entire packaging community in Sri Lanka & always have a rich resource base from local & international guest speakers from WPO.

The brand owners are now giving specific design inputs for material selection considering Sustainability & circularity. We have also included this in our Lankastar Packaging awards scheme (both for companies & student categories).

A blue print is in progress for a Packaging Design Innovation Hub under University of Moratuwa fully dedicated for research & innovation in Packaging.

**Recycling and Recovery**

- Recycled materials have taken a centre stage as there was import restrictions during 2021/22. The realisation was higher for the recyclers.
- The Government also introduced EPR as a solution to plastic packaging waste reduction.



**Single Use Plastics Regulations & Programs**

- The government through the regulator CEA (Central Environmental Authority) expanded the Plastic Ban with some more items of SUP (Single Use Plastics).
- The regulation is gazetted & will be effective from 1st June 2023.
- Straws/cups/cutlery/stirrers/plastic decorations are included in this ban.



**Compostable Packaging Regulations and Programs**

- There is a robust DRS scheme proposed by a private sector packaging company for PET bottles & the Government is evaluating it.
- Government(CEA)is promoting the import of Bio Plastics and Compostable Plastics for packaging applications.





 SRI LANKA Cont.

Lankapack 2022



SRI LANKA Packaging Awards







CHINA



中国包装联合会  
China Packaging Federation (CPF)

Sustainability movements in China

Administration of  
Excessive  
Packaging

Green Packaging  
Education for Kids

Standardisation



Keep Working on the Administration of Excessive Packaging

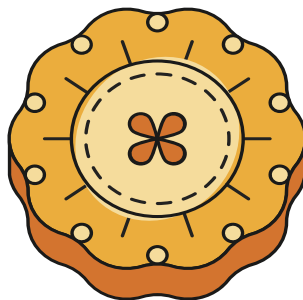


Requirements of restricting excessive  
package – Foods and cosmetics

Mandatory standard



中国出口商品包装研究所



Start from 2022

Start from 2023



The festival  
Will be on  
June 22<sup>nd</sup>





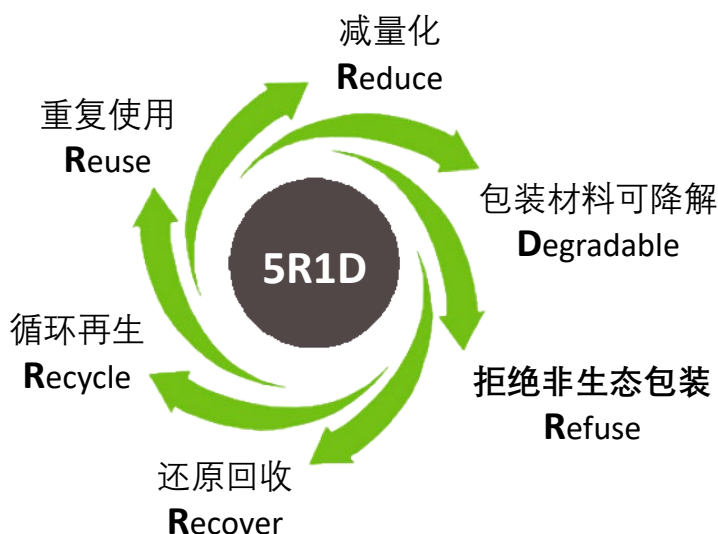
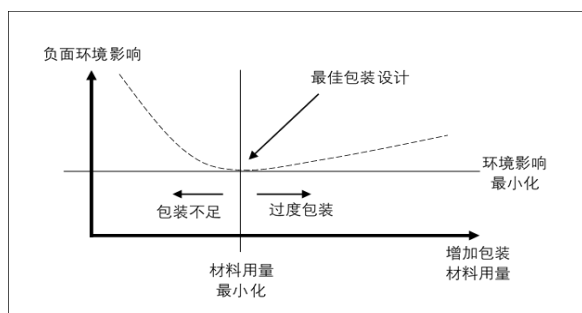
# 2023 Annual Priority

## Administration of Excessive Packaging of Tea



## Green Packaging Concept Education for Kids





The world needs packaging

Packaging needs to be GREEN

## Standardisation

Managed to Complete the project initiation or researching work of:

- Association standards of mono-material for packaging.
- Association standards of active packaging.
- Beijing city standards of green packaging for take out food.



Amending with reference to ISO 18605  
Packaging and the environment – energy recovery



Amending with reference to ISO 18606  
Packaging and the environment – organic recycling







CHINA Cont.



中国包装联合会  
China Packaging Federation (CPF)



Anti-food wasting action for takeout food service



Standards and actions for preventing food wasting

Packaging Standards



Packaging Design for Recycling Guidance translation



Anti-food wasting action for takeout food service

State Administration for Market Regulation  
Ministry of Commerce of PRC

《Instruction of using web takeout food platform to help prevent takeout food wasting》

2023 2<sup>nd</sup> Season



5.4 Billion Orders

- ◆ Start up an anti-waste profile
- ◆ Make smaller dishes for selection
- ◆ Using green packaging







Standards and actions for preventing food wasting



*Guidelines for preventing food waste in Party and government organ canteens*

*General rules for management of anti-food waste in catering*

*Notification of preventing food waste of wedding ceremony*

**Anti-food waste Special Operation  
March-May**

Improve over 270,000 food waste issues  
8986 Administrative Penalties

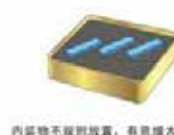
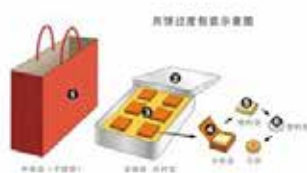
Packaging Standards



*Restricting excessive packaging for commodity—  
General rule*

*Mono material machine direction oriented  
polyethylene laminated film and pouches for  
packaging*

*Machine direction orientated polyethylene film for  
mono-material packaging*





**THAILAND**



**Thailand announces total ban on plastic waste imports by 2025.**

Thailand will enforce a total ban on plastic scrap imports by 2025 in a three-stage plan. The nation’s intention to stop accepting plastic waste from other countries has been discussed since 2020, according to natural resources and environment minister Varawut Silpa-archa, who has deemed the move necessary, saying “We need to protect our country.”



**INDONESIA**



**Vending Machines**

**Nestlé pilots refillable vending machines for cereal brands in Indonesia.**

Nestlé is piloting refillable vending machines for its Milo and Koko Krunch cereals in a bid to contribute towards the reduction of disposable packaging.



**Advanced Recycling**

**ExxonMobil, PT Indomobil Prima Energi and Plastic Energy Collaborate To Accelerate Plastic Recycling In Indonesia.**







AUSTRALIA



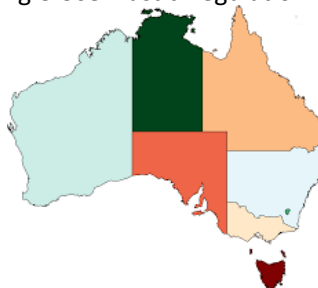
Harmonisation Anyone?



Australian Government  
Department of Health and Aged Care  
Therapeutic Goods Administration

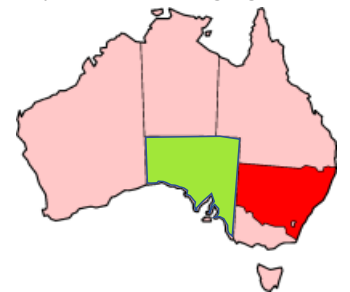
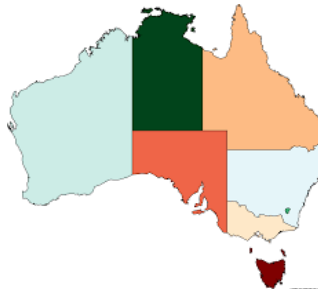
Single Use Plastic Regulation

Kerbside Collection Systems



Container Deposit Schemes

Compostable Packaging Collection



- Australian Return to Store Program for Soft Plastics on PAUSE.
- 2000 supermarkets paused collection.
- ACCC have est. a soft plastics taskforce to explore solutions.
- ARL for soft plastics on pause.
- Taskforce has release a roadmap – developing an interim solution to restore community access to soft plastics recycling.
- Staged approach to re-introduction of in-store collection.



 **AUSTRALIA Cont.**



The National Plastics Recycling Scheme (NPRS) outlines a new kerbside model to collect more household soft plastics.

It has been developed by the Australian Food and Grocery Council with funding support from the Australian Federal Government's National Product Stewardship Investment Fund.

The scheme is based on a model which would see food and grocery manufacturers pay a levy to support the recycling of the soft plastics they create. It is currently being trialled in select areas.



The Victorian Government is consulting on the proposed inclusion of soft plastics in kerbside recycling bins. This consultation is underway and subject to further regulatory assessment.

The Soft Plastics Taskforce applauds this move and strongly encourages state and territory governments to support their local councils to do the same to ensure as much household soft plastic is saved from landfill as possible.





## 2023 AIP Australasian Packaging Conference - 2025 & Beyond

The AIP Australasian Packaging Conference saw close to 300 people in attendance for the first physical conference since before the pandemic. Over the two days more than 70 expert speakers discussed 2025 and Beyond and provided insights in to everything from the future of fibre and renewable materials, food waste, save food packaging, the future of retail, closed loop collection, the ARL marketplace, kerbside recycling, mono material advancements and more.





### 2023 Australasian Packaging Innovation & Design (PIDA) Awards

It was an evening to remember for the 350 packaging professionals gathered at the Crown Promenade in Melbourne for the long-awaited in-person gala dinner presentation of the Australasian Packaging Innovation & Design Awards.







2023 PIDA Award Winners

<p><b>SUSTAINABLE PACKAGING DESIGN OF THE YEAR - RECYCLED CONTENT</b></p>   <p><b>GOLD WINNER</b></p>		<p><b>SUSTAINABLE PACKAGING DESIGN OF THE YEAR - LABELLING</b></p>   <p><b>GOLD WINNER</b></p>		<p><b>SUSTAINABLE PACKAGING DESIGN OF THE YEAR - LABELLING</b></p>   <p><b>SILVER WINNER</b></p>	
 <p><b>SILVER WINNER</b></p>	 <p><b>BRONZE WINNER</b></p>	 <p><b>SILVER WINNER</b></p>			
<p><b>SUSTAINABLE PACKAGING DESIGN OF THE YEAR - MONO MATERIAL ADVANCEMENTS</b></p>   <p><b>GOLD WINNER</b></p>		<p><b>SUSTAINABLE PACKAGING DESIGN OF THE YEAR - RENEWABLE MATERIALS</b></p>   <p><b>GOLD WINNER</b></p>		 <p><b>SILVER WINNER</b></p>	
 <p><b>SILVER WINNER</b></p>	 <p><b>BRONZE WINNER</b></p>	 <p><b>GOLD WINNER</b></p>	 <p><b>BRONZE WINNER</b></p>	 <p><b>HIGH COMMENDATION</b></p>	
<p><b>SUSTAINABLE PACKAGING DESIGN OF THE YEAR - COMPOSTABLES</b></p>   <p><b>GOLD WINNER</b></p>		<p><b>SUSTAINABLE PACKAGING DESIGN OF THE YEAR - COMPOSTABLES</b></p>   <p><b>SILVER WINNER</b></p>			



## Save Food Packaging Design Criteria Resources

This booklet aims to be a go-to resource for the Australian food industry in supporting excellence in packaging design that reduces food waste.

The information is sourced from leading literature, food packaging expertise and research insights. It is to provide recommended strategies that are co-created by researchers and industry experts. This initiative is in support of the End Food Waste CRC REDUCE program which aligns to the 2030 UN Sustainability Goals and 2025 Sustainable Packaging Targets. It aims to combat the significant issue of 1/3 of all globally produced edible food going to food waste.

The goal is to promote sustainable food systems through best practice packaging design criteria that is adaptive for all food industries seeking positive change and greater value for all.



SAVE FOOD PACKAGING DESIGN CRITERIA CHECKLIST	
<p><b>1. DESIGN TO CONTAIN &amp; PROTECT THE PRODUCT</b></p> <p>FROM SPOilage &amp; DAMAGE THROUGH MANUFACTURING, WAREHOUSING &amp; VARIOUS STAGES OF DISTRIBUTION</p> <p><b>SECTION SUMMARY</b></p> <p>CASE STUDIES</p> <p>ICONOGRAPHY</p>	<p><b>2. DESIGN TO PRESERVE &amp; EXTEND SHELF LIFE</b></p> <p>&amp; ENHANCE PRODUCT APPEAL</p> <p><b>SECTION SUMMARY</b></p> <p>CASE STUDIES</p> <p>ICONOGRAPHY</p>
<p><b>3. DESIGN TO PROVIDE CONSUMER CONVENIENCE</b></p> <p>TO NOT WASTE FOOD DURING HANDLING IN THE HOUSEHOLD</p> <p><b>SECTION SUMMARY</b></p> <p>CASE STUDIES</p> <p>ICONOGRAPHY</p>	<p><b>4. DESIGN TO COMMUNICATE TO CONSUMERS</b></p> <p>&amp; PROMOTE HOW TO HANDLE, STORE, PREPARE &amp; REUSE FOOD PRODUCTS</p> <p><b>SECTION SUMMARY</b></p> <p>CASE STUDIES</p> <p>ICONOGRAPHY</p>
<p><b>5. DESIGN TO BALANCE FOOD &amp; PACKAGING WASTE TARGETS</b></p> <p>FOR OPTIMAL PACKAGING</p> <p><b>SECTION SUMMARY</b></p> <p>CASE STUDIES</p> <p>ICONOGRAPHY</p>	

PRODUCT PROTECTION PROPERTIES	
<input type="checkbox"/>	<b>PROTECT THE PRODUCT</b> Protection against outer physical impacts - shock, vibration, compression, puncture, insects, rodents, breakage and spillage, leakage, resist pressure, strikes, rips, sharp edges, and a reliable product closure.
<input type="checkbox"/>	<b>PRODUCT BARRIER/VENTILATED DESIGN</b> Protection against undesired (transmission, permeation, migration, absorption of light, gases, moisture, flavour, odour, particles, micro-organisms, contamination, oxygen, water or other agents from surrounding atmosphere, maintaining quality, safety and hygiene.
<input type="checkbox"/>	<b>QUALITY SEALING</b> Keeping the packaging tight to avoid product leakage or atmospheric ingress.
<input type="checkbox"/>	<b>TEMPERATURE CONTROL/FREEZER SAFE</b> Keeping the product at optimal temperatures, maintaining the properties of the packaging, when considering specific supply chain (ambient, chilled, frozen environment).
<input type="checkbox"/>	<b>IN-STORE INTERVENTION PROTECTIONS</b>
<input type="checkbox"/>	<b>ANTI-TAMPER PROTECTION</b> Anti - theft, pilferage, tampering, vandalism, and counterfeiting that informs consumers that the authenticity and integrity has been kept.

CRITERIA #5 DESIGN TO BALANCE FOOD & PACKAGING WASTE TARGETS	
<input type="checkbox"/>	<b>MATERIAL FACTORS AND ASSESSMENTS</b>
<input type="checkbox"/>	<b>SUSTAINABLE PACKAGING</b> Ensuring sustainable packaging Designed to gain greatest buy-in from consumers to join the fight in food waste. Life Cycle Assessments (LCA) incorporating data measurements of food types sold and applied. Use SFPA and phasing out single-use plastics will gain greater trust with consumers.
<input type="checkbox"/>	<b>ALIGNING BUSINESS PLANS AND NEW PRODUCT DEVELOPMENTS (NPDs) TO CIRCULAR ECONOMY CRITERIA, STANDARDS, LEGISLATION AND GLOBAL TARGETS</b>
<input type="checkbox"/>	<b>SUSTAINABLE PACKAGING TARGETS</b> Adopt, familiarise, and promote Sustainable Targets and Practices in All New Product Developments.
<input type="checkbox"/>	<b>CONSUMER PERCEPTIONS ASSESSMENT OF SFP NEW PRODUCT DEVELOPMENTS</b>
<input type="checkbox"/>	<b>TEST CONSUMER SENSORY EXPERIENCE</b> Testing consumers sensory experience and acceptance when appraising new SFP developments and the products containing (touch, taste, smell etc).
<input type="checkbox"/>	<b>TEST FOOD WASTE PACKAGING WASTE</b> Testing consumers acceptance of (takeaway/tradefood) decisions made between Sustainable packaging and Food waste reduction strategies.
<input type="checkbox"/>	<b>TEST SAVE FOOD WASTE DESIGN</b> Testing consumers acceptance of the proposed SFP innovations prior to commercialisation. Consumer knowledge and acceptance of awareness, interest, and appreciation of their functions of packaging are major factors in their refusal or acceptance of emerging packaging technologies (Brennan et al (2021)).



### Save Food Packaging Design Criteria Resources

## SAVE FOOD PACKAGING DESIGN CRITERIA ICONS

#### SAVE FOOD PACKAGING DESIGN CRITERIA RESOURCE BOOKLET

**1 DESIGN TO CONTAIN & PROTECT THE PRODUCT**

**2 DESIGN TO PRESERVE & EXTEND SHELF LIFE**

**3 DESIGN TO PROVIDE CONSUMER CONVENIENCE**

**4 DESIGN TO COMMUNICATE TO CONSUMERS**

**5 DESIGN TO BALANCE FOOD & PACKAGING WASTE TARGETS**

## SAVE FOOD PACKAGING DESIGN CRITERIA CASE STUDIES

#### 2017 SAVE FOOD PACKAGING DESIGN AWARD

**PRODUCT**  
Cryovac Freshness Plus Active Barrier

- Farm to plate
- Avocados saved from landfill
- Up to 90 Day shelf life
- Reduces product spoilage
- Extends freshness and flavour
- Valorised product
- On-pack communication
- Designed to preserve
- Designed to protect

#### 2019 ACCESSIBLE PACKAGING DESIGN OF THE YEAR

**PRODUCT**  
Cryovac® Grip and Tear® (including 'small tab') was designed to foster ease-of-use for packaged meat, poultry, seafood products for processors, food service, and retail markets

- Simple and intuitive
- Single opening action
- Clear Grip & Tear opening instructions
- No more opening tools required
- Ease of use for meat, poultry and seafood
- Improved food service and retail market handling

#### SOUTHERN FRESH FOODS

- Borne from COVID-19 lockdowns
- Created new product from restaurant waste
- Collectable recipe card to inspire consumers and reduce meal fatigue
- FSC Certified Board + non-toxic inks
- Suited for in-home cooking
- Reduces Product Waste
- Recyclable through soft plastics programs





Ruby Chan PhD Research

### Resources from the research papers of this PhD

#### Paper 1

Table of packaging related household food waste drivers and suggested packaging solutions

<https://onlinelibrary.wiley.com/doi/10.1002/pts.2611>

#### Paper 2

Charts comparing suggested packaging solutions from academic research and industry press releases

<https://www.sciencedirect.com/science/article/pii/S0821344923001226?via=ih.L3DHub>

#### Paper 3

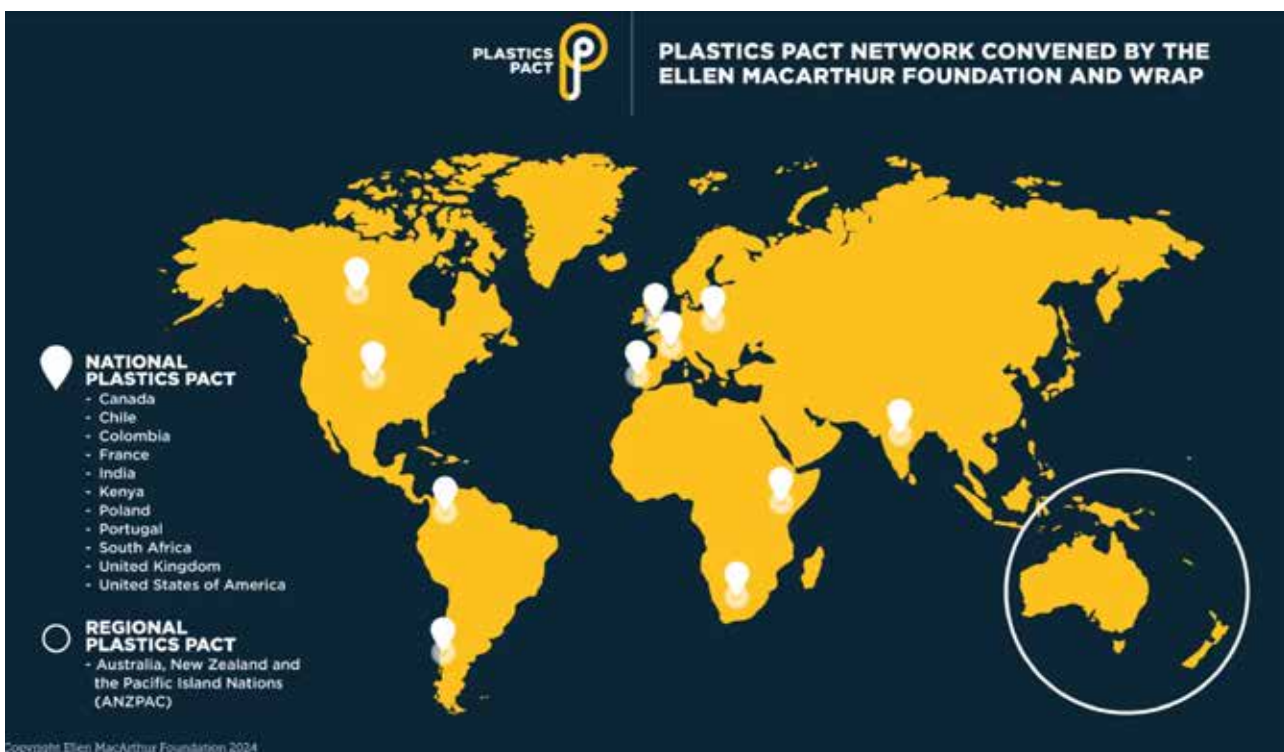
Consumer & industry insights on reclosable/resealable packaging and household food waste

<https://www.sciencedirect.com/science/article/pii/S09594662623015755>

ANZPAC Plastics Pact

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

Together, through shared knowledge, investment and industry led innovation we will implement solutions tailored to remote and regional communities in the ANZPAC region.



## Environment Ministers' Meeting

### 9 June 2023 Agreed Communiqué

The Ministers agreed that:

The Australian Government will lead development of a national framework to direct Australia's transition to a circular economy.

For the first time, Australia will mandate obligations for packaging design as part of a new packaging regulatory scheme based on international best practice and make industry responsible for the packaging they place on the market.

This scheme will regulate out harmful chemicals and other contaminants in packaging.

A national roadmap will be developed for staged improvements to the harmonisation of kerbside collections.



### Australian Government

Department of Climate Change, Energy,  
the Environment and Water

**To drive the transition to a circular economy for packaging that takes a whole-of-supply-chain approach, the Department is proposing four regulatory scheme objectives to be underpinned by mandatory obligations:**

1. Ensure all packaging is designed for circularity.
2. Increase the amount of reusable packaging.
3. Ensure packaging is recovered.
4. Increase the amount of recycled content in packaging.

## Preparing for a stronger co-regulatory model



*The Commonwealth and State and Territory Environment Ministers have committed to reforming the framework for packaging, with the reformed framework to be in place by 2025.*



**Horizon #1**  
Current – Dec 2025

**Horizon #2**  
A co-regulated circular packaging  
system post 2025

Between now and 2025, action is needed to **accelerate progress** towards the 2025 Targets.

Mandated Targets and Design Standards and system obligations to **further drive the transition to a circular economy for packaging.**





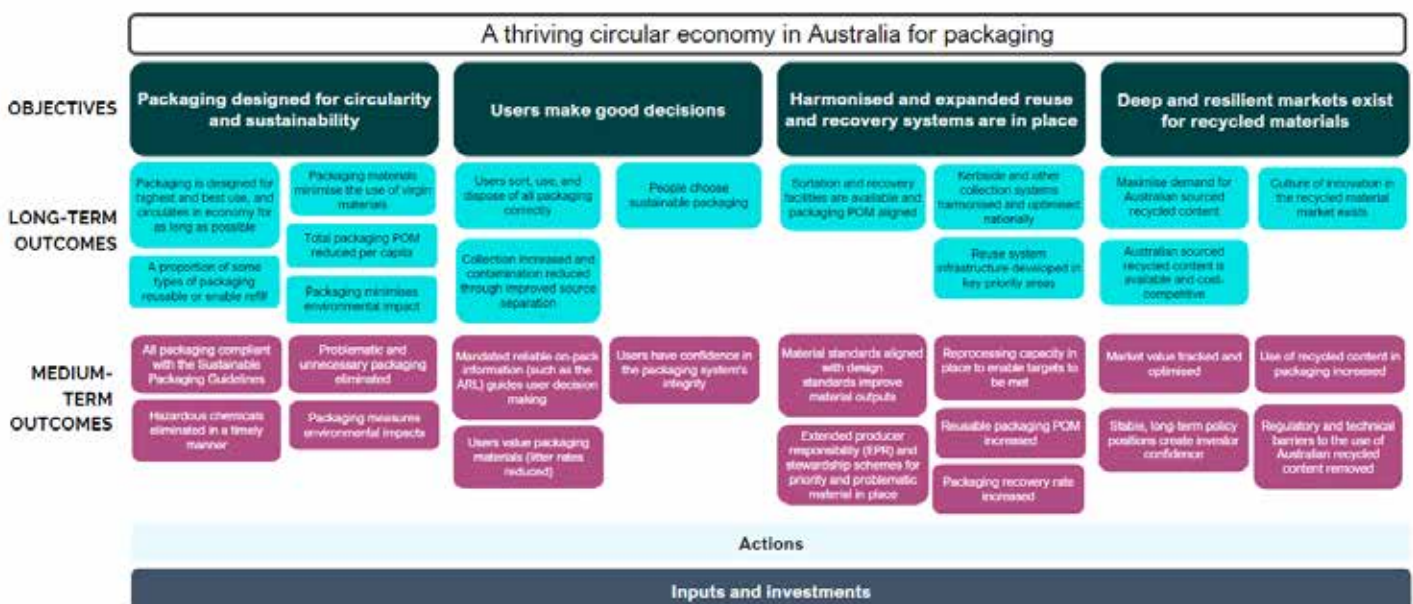
## Stakeholder feedback highlights



- Single, overarching scheme administrator **(85% support)**
- Administrator to be independent of govt **(82% support)**
- Administrator to periodically review and report on system progress **(95% support)**
- GHG emissions to be included in packaging design considerations
- To increase reusable packaging, assistance is needed most of all to manage consumer expectations and logistics
- Mandatory extended producer responsibility schemes to drive collection and recycling **(84% support)**
- Most members will need 1-3 years to establish systems to report SKU-level data
- Nearly all participants reported that the envisaged regulatory framework will support their business's ESG position

14

## What does the framework need to achieve?



 **AUSTRALIA Cont.**

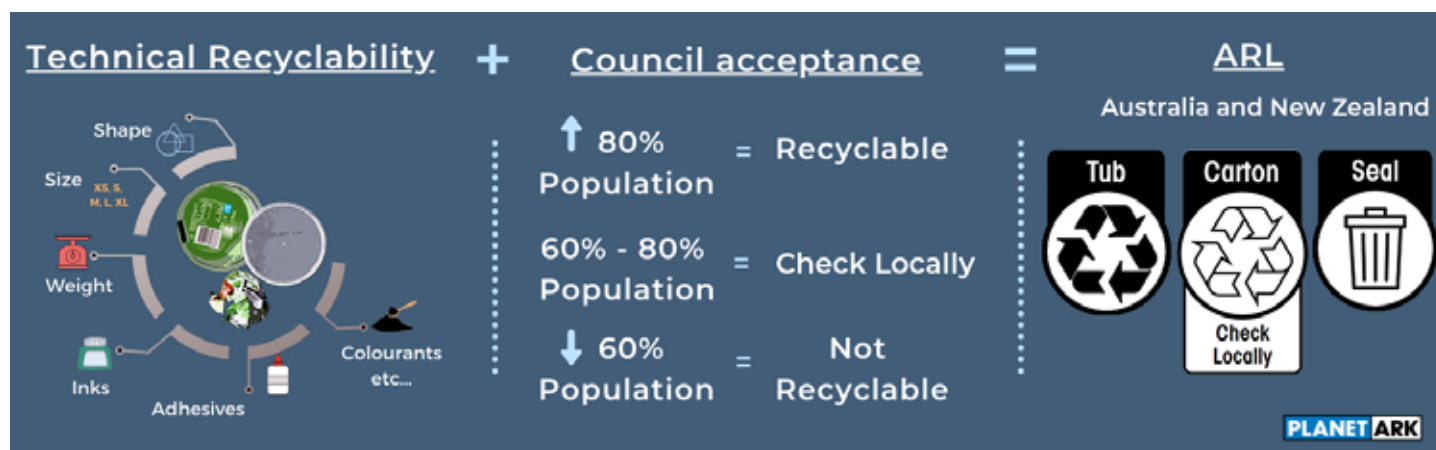


The Federal government will:

- Become the regulator of new mandated packaging design standards.
- Set minimum recycled content requirements.
- Prohibit the use of harmful chemicals in packaging.
- The endorsement of a national traceability framework for recycled materials.
- The agreement of a framework to improve co-ordination across governments on product stewardship.

**Australian Soft Plastics:**

- Recovery solutions are changing faster than packaging update cycles.
- Collections expected to return in 12-18 months.
- New Check Locally ARL logo for soft plastic packaging in Australia to be applied when artwork is updated or when creating new product lines.
- Replace REDcycle as soon as practical.



- APCO update regarding the Australasian Recycling Label's (ARL), newest Check Locally logo.
- Steps brand owners need to take in order to be eligible for new label.
- Following the collapse of REDcycle, brand owners are required to update any soft.
- Plastics labelling that directs consumers to 'Return to Store' or 'Store Drop Off'.
- The ARL Program thresholds for soft plastics were revised last year and are now in effect. Packaging that meets these thresholds is now eligible for the new Check Locally logo. If your packaging does not meet the new thresholds, the Not Recyclable logo must be applied.

- In order to qualify to use the Check Locally logo, soft plastics will now need to meet new thresholds.
- The new thresholds are aligned with global best practice and CEFLEX. They encourage design for circularity and enable higher value recovery.
- All ARL members will be provided with instructions on how to assess their packaging against the new thresholds.



New soft plastics thresholds

		Guidance	
		Previous AU thresholds	New AU thresholds
Primary materials	HDPE	Minimum 70%	Minimum 80%
	LDPE	Minimum 70%	Minimum 80%
	PP	Minimum 70%	Minimum 80%
	BOPP	Minimum 70%	Minimum 80%
Secondary materials	PET	Maximum 30%	Maximum 0%
	PVDC	Maximum 10%	Maximum 0%
	Aluminium ( <i>not metallised</i> )	Maximum 30%	Maximum 0%
	Paper	Maximum 30%	Maximum 0%
	Nylon	Maximum 30%	Maximum 10%
	EVOH	Maximum 30%	Maximum 10%
	PVOH	Maximum 30%	Maximum 10%
	AIOx	N/A	Maximum 10%
	SiOx	N/A	Maximum 10%
	Acrylic	N/A	Maximum 10%
	PVC	Maximum 0%	Maximum 0%
	PS	Maximum 0%	Maximum 0%
	Bioplastic	Maximum 0%	Maximum 0%

RECYCLEMATE: New Recycling App for Consumers

Collaboration to deliver leading recycled advice for used packaging to the Australian community






The Australasian Recycling Label (ARL) Program is an on-pack labelling scheme that is **helping consumers recycle packaging correctly** and supporting brand owners and packaging manufacturers to **design recyclable packaging** at end-of-life.



Recycle Mate is a dynamic recycling education platform that **combines artificial intelligence technology** with Australia's **most comprehensive recycling directory** to reduce contamination in recycling systems, improve resource recovery and support a circular economy.

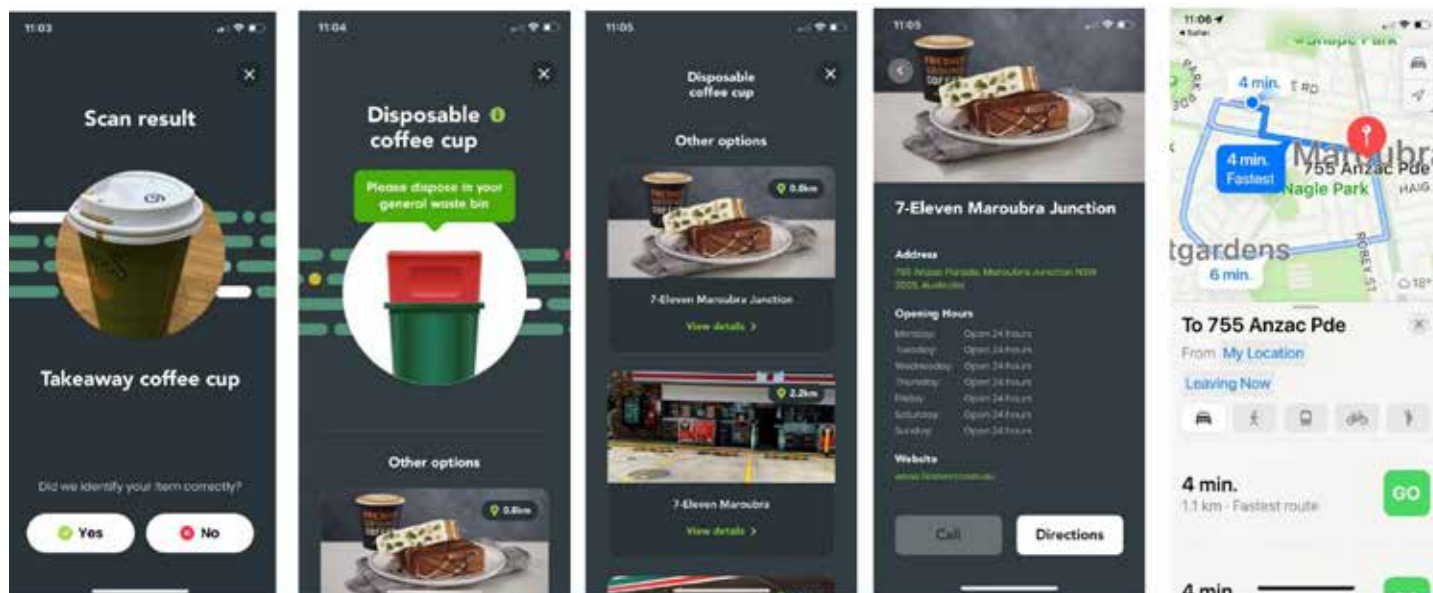
**ARL as our end goal:**  
on-pack label which reflects consistent collection schemes supported by mature recycling markets

**Recycle Mate helping navigate the transition:**  
relaying the local kerbside recycling rules and providing geolocated directions to away from home recovery options, as new programs evolve.





## RECYCLEMATE: New Recycling App for Consumers



## Final Australian State to launch Container Deposit Scheme

### A better way to recycle drink containers in Victoria

On 1 November 2023 Victoria's container deposit scheme, CDS Vic, commenced.

The scheme rewards Victorians with a 10-cent refund for every eligible can, carton and bottle they return.

It is part of important work that is transforming Victoria's waste and recycling system.

CDS Vic provides shared benefits to the community, environment and economy by delivering:

- More and better recycling.
- Less waste - old containers become new ones.
- Less litter - cut by up to half.
- Hundreds of new jobs and economic opportunities across Victoria.
- Opportunities for charities, community groups, environmental organisations, sports and educational organisations to raise funds.
- A cleaner, greener state.

### What you can't return ⊗



- ⊗ Wine and spirit bottles
- ⊗ Cordial bottles
- ⊗ Juice containers (over 1L)
- ⊗ Paperboard cartons (over 1L)
- ⊗ Plain milk containers
- ⊗ Flavoured milk containers (over 1L)

## VICTORIA'S CONTAINER DEPOSIT SCHEME

### IS COMING 1 NOVEMBER 2023

### What you can return ✔



- ✔ Aluminium cans
- ✔ Plastic bottles
- ✔ Glass bottles
- ✔ Paperboard cartons (under 1L)
- ✔ Steel bottles/cans





### AIP Celebrates 60th Anniversary in style

The Australian Institute of Packaging hosted a gala dinner at The Atrium in Melbourne on 1 September to celebrate its impressive 60-year legacy, and mark the special milestone in the company of past presidents, AIP Fellows, lifetime members and VIP guests.

## AIP 60th Anniversary Celebrations





### 2023 WORLDSTAR AWARD WINNERS FOR THE AUSTRALIA/NEW ZEALAND REGION







**AUSTRALIA Cont.**



Australasian Institute of Packaging

**2023 WORLDSTAR AWARD WINNERS FOR THE AUSTRALIA/NEW ZEALAND REGION**

**CAPS & CLOSURES WINS 2X SPECIAL AWARDS & 4X GENERAL WORLDSTAR PACKAGING AWARDS IN 2023**



**Caps & Closures** was recognised with **Silver recognition** of a **Packaging that Saves Food Special Award** for the **ThermoShield Temperature Monitoring System – Food**. This brought the tally for Caps & Closures to 6x WorldStar awards; making them the first Australian company in history to win this amount of awards.

*“When the recognition comes from your industry peers, representing our Australia comes with immense pride. Receiving two WorldStar Special Awards recognising our efforts in Save Food Packaging and Accessible Packaging was tremendous. Our dedicated team has invested hours, weeks and months into finding solutions for challenging issues we all face as consumers.”*

**Brendon Holmes,**  
Managing Director of Caps & Closures.



**CAPS & CLOSURES WINS 2X WORLDSTAR PACKAGING SPECIAL AWARDS IN 2023**



**Caps & Closures** was recognised with a **Silver recognition** in the **NEW Accessible Packaging Design Special Category** for the **EzyGrip** and with a **Silver recognition** in the **Packaging that Saves Food Special Category** for the **ThermoShield Temperature Monitoring System – Food**. This brought the tally for Caps & Closures to 6x WorldStar awards; making them the first Australian company in history to win this amount of awards.

*“Our focus on fighting food loss and waste, brand protection, accessibility and sustainability remains, and these awards inspire us further to continue down this path. It was good to see many companies at interpack adopting similar innovative solutions that improve the consumer experience in accessibility and functionality.”*

**Brendon Holmes,** Managing Director of Caps & Closures.



ANZ AWARDS PROGRAM



COORDINATED BY



EXCLUSIVE ENTRY TO



2023 WORLDSTAR AWARD WINNERS FOR THE AUSTRALIA/NEW ZEALAND REGION

BIOPAK TAKES OUT THE 2023 WORLDSTAR SUSTAINABILITY GOLD SPECIAL AWARD



BioPak also made history being the **first Australian** company to win the coveted **GOLD Sustainability Special Award** for the **Sugarcane Pulp Hot & Cold Cup Lids**. This brought BioPak's tally to **3x WorldStar Packaging Awards** for the 2023 edition.

Gary Smith, Chief Executive Officer, BioPak who was on a jetlag high during the evening added that, "Each day we come into BioPak with a passion for change and a passion for sustainable improvement in our industry. There is little focus on anything else. Working at a screen all day, working in a closed environment not understanding the impact of what we take for granted as our day-to-day, has a danger of stuffing passion. Attending the WorldStar Awards and being surrounded by so many innovators and change makers was humbling and a boost to make me excite all at our business into working harder and smarter at continual improvement and sustainable developments! We were humbled to be singled out in an evening to receive the coveted Gold for the Sustainability special award, where there is so much good in overcoming mediocrity and bad practices. Seeing so many new developments and innovations, and meeting so many talented people was a privilege!"



AMCOR FLEXIBLES WINS 2023 WORLDSTAR PACKAGING AWARD



Amcor Flexibles Asia Pacific wins a **2023 WorldStar Award - Food Category** for the **PrimeSeal™ Eco-Tite® Recycle-Ready Shrink Bag**.

"I am delighted to share Amcor's new PrimeSeal™ Eco-Tite® Recycle-Ready Shrink Bag has just won a prestigious WorldStar award at the World Packaging Organisation's Global Packaging Awards. This international recognition continues to highlight Amcor's position as leader in market innovation in meat packaging locally and globally, demonstrating what we can deliver for our customers. The development of the Eco-Tite® Shrink Bag has been no small feat for our local team, creating a new lighter, high barrier shrink bag that is free of PVdC and other contaminants that would prevent it from being recycled. It has been designed to be circular, with the ability to add local advanced recycled content by 2025. We will proudly be launching the first shrink bags in Australia in early 2023."

Mike Cash, President, Asia Pacific Flexibles



ANZ AWARDS PROGRAM



COORDINATED BY



EXCLUSIVE ENTRY TO





**Australian Greenwashing Regulations**

**Key issues identified in the sweep**

1. Vague and unqualified claims - products are made using 'sustainable' materials.
2. A lack of substantiating information
3. Use of absolute claims 100% plastic free; 100% recyclable; 100% recycled content.
4. Use of comparisons - generates less waste when compared to conventional alternatives.
5. Exaggerating benefits or omitting relevant information.
6. The use of aspirational claims, with little information on how these goals will be achieved. Reducing packaging or reduced waste to landfill.
7. Use of third-party certifications.
8. Use of images which appear to be trustmarks. (logos or symbols on their websites and packaging that used nature-based imagery such as leaves and the planet, and the colour green).



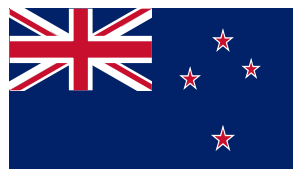
Latest research from RMIT University , Fight Food Waste CRC & Meat & Livestock Australia shows inconsistent fridge temperatures and confusing cold storage advice could be contributing to meat waste in Aussie households.

Australian households waste more than 140,000 tonnes of meat a year, and increasing our understanding of how people are using, or not able to effectively use, their fridges can help reduce meat waste.

Read more about the research findings below, or dive into the full report.







NEW ZEALAND



New Zealand to regulate Single Use Plastics

Phasing out hard-to-recycle and single-use plastics

The Government is phasing out certain hard-to-recycle plastics and six single-use items in three tranches. This shift is also part of a wider ambition to move Aotearoa New Zealand towards a low-emissions, low-waste economy.



### Phasing out problem plastics in Aotearoa

Te whakamoe i ngā kirihou whakapōraruru

Plastics waste is one of our generation's greatest environmental challenges – regularly ending up in landfills or the ocean. To support Aotearoa's move towards a low-emissions, low-waste economy, we're phasing out these plastics over the next four years.

Phase	Items to be phased out
1 October 2022	<ul style="list-style-type: none"> <li>PVC food trays and containers*</li></ul>
Mid 2023	<ul style="list-style-type: none"> <li>Polystyrene takeaway food and drink packaging</li> <li>Expanded polystyrene food and drink packaging</li> <li>Plastic with pro-degradant additives, eg. oxo and photo-degradable plastics</li> <li>Plastic drink stirrers</li> <li>Plastic stemmed cotton buds</li> </ul>
	<ul style="list-style-type: none"> <li>Single-use: Plastic produce bags</li> <li>Plastic plates, bowls and cutlery</li> <li>Plastic straws*</li> <li>Plastic produce labels**</li> </ul>
	<ul style="list-style-type: none"> <li>Mid 2025</li> </ul>
	<ul style="list-style-type: none"> <li>All other PVC and polystyrene food and drink packaging</li> </ul>

\* Plastic straws will be available for disabled people and medical use  
 \*\* See the Ministry's website for further information on scope

For more information, visit <https://environment.govt.nz/waste/plastic-phase-out/>

Published in August 2022 by the Ministry for the Environment | Publication number: INF0 1077

He taiao tōnui mō ngā reanga katoa – a flourishing environment for every generation.

NZ recycling, food waste to get an overhaul

The changes also mean kerbside food scrap collection will be far more accessible, recycling labelling will be clearer, and the deferred container return scheme could still be introduced on time.

The reforms intend to improve the way New Zealanders deal with waste, as 100,000 tonnes of recyclable materials go to landfill, and 16% of what goes to out to recycle is not recyclable.





The definition of food loss and waste is below. This overarching definition will be used in measuring the national baseline for food loss and waste in Aotearoa.

The overarching definition encompasses two constituent components: food loss and food waste. To allow food loss and food waste to be analysed separately, these terms are individually defined below.

### Food loss

*Imported or domestically produced food and drink, including inedible parts, which leave the food supply chain from the point that crops and livestock are ready for harvest or slaughter through to the processing and manufacturing stage (including transportation and storage) to be recycled, recovered or disposed of in Aotearoa New Zealand.*

### Food waste

*Imported or domestically produced food and drink, including inedible parts, which leave the food supply chain from the wholesale, retail and marketing sectors onwards to the point of consumption, to be recycled, recovered or disposed of in Aotearoa New Zealand.*



Food loss vs food waste



WasteMINZ have released their 'Guidelines on claims about recyclability, recycled content, reusability and repairability' for New Zealand.

**This guideline has been developed with two key aims:**

To help organisations avoid making inaccurate or misleading claims about the recyclability, reusability, repairability or recycled content of their products.

To help customers and consumers make informed pre-purchase choices with regards to the properties and post-use destinations of the products they buy.

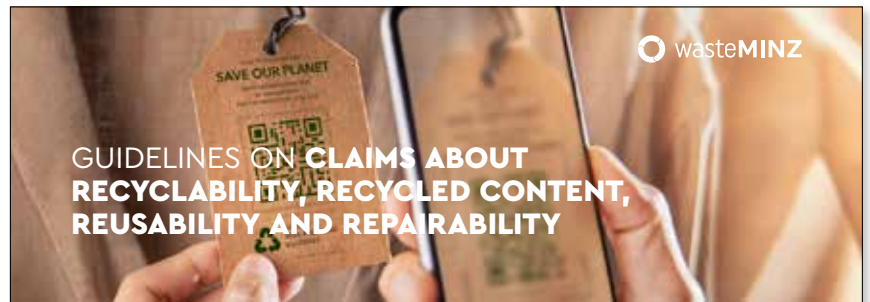
**Download the guide**



New Zealand Government announces standard materials for kerbside collections guidance for territorial authorities.

From 1 February 2024, territorial authorities will be required to standardise the materials they accept in council-managed kerbside recycling, food scraps, and food organics and garden organics (FOGO) collections.

This guidance document provides further detail and examples of the kerbside standard materials to support territorial authorities as they implement the new requirements.



**GUIDELINES ON CLAIMS ABOUT  
RECYCLABILITY, RECYCLED CONTENT,  
REUSABILITY AND REPAIRABILITY**

This guideline has been developed with two key aims:

**To help organisations** avoid making inaccurate or misleading claims about the recyclability, reusability, repairability or recycled content of their products.

**To help customers and consumers** make informed pre-purchase choices with regards to the properties and post-use destinations of the products they buy.

Inaccurate or misleading claims regarding the features of products risk breaching the Fair Trading Act 1986 and are detrimental to national and global efforts to reduce pollution and climate change.

This guideline provides an explanation of terms relevant to packaging and products for which Aotearoa New Zealand households are the intended or actual end-users.

Where possible follow the [waste management hierarchy](#) and choose reusable packaging over single use packaging and avoid products with excess packaging.

**CONSIDERATIONS  
WHEN APPLYING  
THESE TERMS**

**Specifying what the claim refers to**

An environmental claim should specify whether it refers to the product, the product's packaging, a

service, or a portion of the product, package, or service (if it doesn't apply to all). For example, a label that claims "recycled content" should specify if this refers to the label or product itself, and this context-specific information needs to be as prominent as the claim, i.e. "This label is made from 100% recycled paper" rather than the vaguer "Made from 100% recycled material."



**Third party independent certifiers**

A certification indicates a product or organisation has met certain standards set by an independent third party (such as those issued by the International Standards Organisation). The certification should be relevant to the product or process being promoted. The certification should also be awarded by an independent third-party. Forest Stewardship Council (FSC) certification is a good example of credible, third party certification. A certification applied by the organisation to their own product or to that of a customer is not credible and should not be used.

**SECTION 1: TERMS  
RELATED TO REUSE**

**Reusable packaging**

**Reusable packaging** is durable/sturdy packaging that is refilled/multiple times (in its existing form) with the same type of purchased product for which it was originally designed, or for the same purpose, in a system of reuse.

A **system of reuse** is the established organisational, technical and/or financial arrangements that ensure the packaging achieves a minimum number of trips or reuse cycles in practice (not just in theory).

These arrangements could include deposit return systems or other collection programmes, tracking apps, reverse logistics (which ensures goods are returned from end users back to the brand or retailer for reuse), and the necessary infrastructure to prepare packaging for reuse or to enable consumers to refill their own containers (such as, bulk dispensers or vending systems).

The minimum number of trips will vary from product to product, but should always exceed the 'breakeven' point of the packaging chosen for the system. The **breakeven point** is the number of uses at which the overall impact per use for a reusable product falls below that of a single use equivalent. Calculating this will require companies to understand the impact of the product across its life cycle.

**Materials for  
kerbside collection:**



Glass bottles and jars



Paper and cardboard



Plastic bottles,  
trays and containers  
1, 2 and 5



Aluminium and  
steel tins and cans

**Ngā momo matū mō te kohinga  
hangarua paeara**  
Standard materials for kerbside  
collections

Guidance for territorial authorities







**WPO**  
WORLD  
PACKAGING  
ORGANISATION

PACKAGING PACKAGING PACKAGING PACKAGING  
PACKAGING PACKAGING PACKAGING PACKAGING  
PACKAGING PACKAGING PACKAGING PACKAGING



# 2023 WPO Member Sustainability Update: A global lens



[www.worldpackaging.org](http://www.worldpackaging.org)