

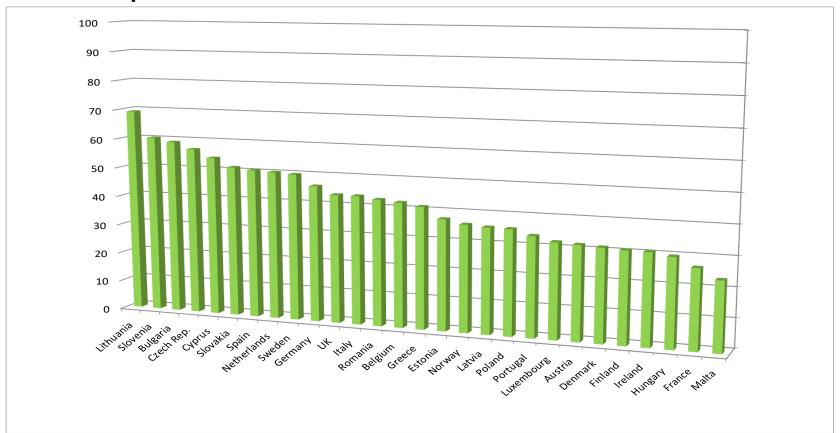


Plastics – the Main Challenge in Packaging Circularity





Europe - Plastic Recycling Quotas 2018 Room for Improvement...





Packaging & packaging waste related policies in the EU

General policies

Waste Framework
Directive

Landfill Directive

Packaging & Packaging Waste Directive

Essential
Requirements:
Packaging
Standards

Waste incineration
Directive

Targeted policies

Circular Economy Package

Waste to Energy

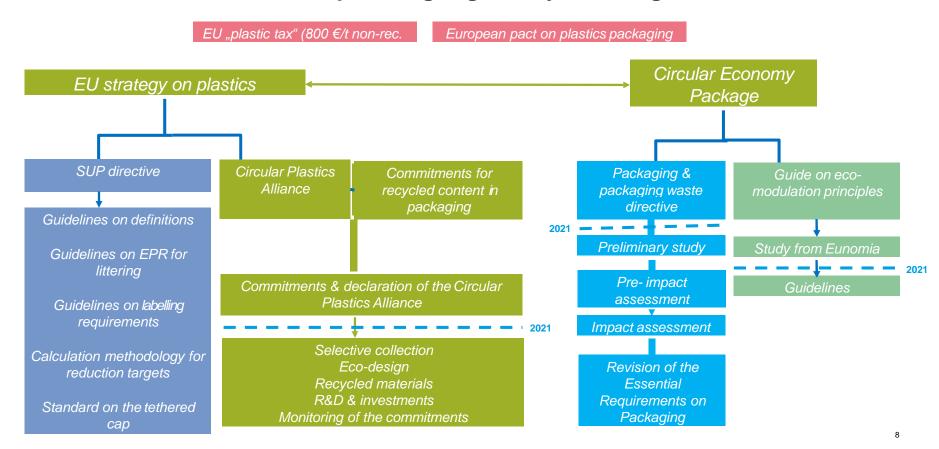
Plastic bag directive

Single Use Plastics Directive – Bans, Labels, Requirements

7



Overview of the current & upcoming regulatory challenges



June 2021 | 5



Single-Use Plastics Directive/Labeling Directive

2021 2025 2030

- 2021: Prohibition of plastic disposable dishes (EPS), plastic cutlery and plates, straws, cotton swabs, oxodegradable plastics...
- 2021: SUP Labeling Directive







- 2023: Responsibility of Manufacturers for **littering** costs for tobacco filters, wet wipes, sanitary items, etc.
 - 2024 Tethered caps on beverage containers
 - 2025: 25 % Minimum recycled content rates for plastic disposable PET beverage bottles
 - 2025: 77 % collection target for recycling beverage bottles
 - 2030: 30 % minimum recycled content all beverage containers
 - 2030: 90 % collection target for recycling beverage bottles



Plastics policies and legislation - Targets

	EUC - PPWD	EUC - SUP	CEAP - Plastics Strategy	Circular Plastics Alliance	European Plastics Pact
Targets	65% recycling of all packaging waste by 2025	77% collection of plastic beverage bottles by 2025	By 2030, all plastics packaging placed on the EU market is either reusable or can be recycled in a cost-effective manner	By 2025, 10 million tonnes of recycled plastics to be used in European products	By 2025, all single-use plastics products and packaging will be reusable or at least 100% recyclable
	70% recycling of all packaging waste by 2030	90% collection of plastic beverage bottles by 2029 – possible without deposit?	By 2025, 10 million tonnes of recycled plastics find their way into new products on the EU market		Net reduction in use by 2025 compared to 2017
	50% recycling of plastic packaging by 2025	25% of recycled content in PET beverage bottles by 2025			At least 70% of all single-use plastics products are recycled to a high standard
	55% recycling of plastic packaging by 2030	30% of recycled content in plastic beverage bottles by 2030			30% recycled content in single- use plastic products and packaging by 2025 Specific targets for: PET bottles 55%; Milk bottles 45%; PE bottles 30%, PET trays 55%; PP PTTs 20%; PE films 18%



EPR: framework for circularity in (Plastics) recycling





EPR – How Far to "Extend" Extended Producer Responsibility?

Increasing demands on payment obligations of industry

"Brexit-Tax" on non-recycled plastic packaging

800 €/to non-recycled plastic 1.4 bn €/year for Germany Beneficiary: EU household



Littering costs

Obligation for producers to cover cost of litter cleanup for defined plastics.
Estimate for Germany:
ca. 700 Mio. €/year



Eco-Modulation of EPR fees

"Malus" for insufficiently recyclable packaging: 200-500 Mio. €/Year?

Beneficiary: Producers, Recyclers





Packaging Value Chain

Increase collaboration along the packaging value chain:

- HolyGrail 2.0 Pioneering Digital Watermarks for a Circular Economy
- CEFLEX DRIVING TOWARDS CIRCULAR ECONOMY
- Close the Glass Loop bringing together the entire glass packaging ecosystem
- 4EverGreen Perfecting circularity together
- Circular Plastics Alliance voluntary pledge for 10 Mio t recyclates











Get ready...

- Revision of the PPWD in 2022/2023
- New "Essential Requirements" to define recyclability and to ensure that only reusable and/or recyclable packaging is put on the market from 2030
- Additional recycled content targets for further packaging
- Defining (chemical) recycling?
- Further restrictions for exporting plastic waste
- Targets for consumption reduction in packaging/Prevention
- Harmonizing separate collection Colors? Labels?
- Fee modulation harmonized approach or guidelines



Call to Action!

Materials Producers – innovative design for circularity, develop applications for PCR

Packaging Producers –
Design4Recycling and PCR
integration

Plastics Circularity

Recycling industry – openness to innovation and cooperation

Consumer goods industry

– packaging sustainability as advantage!



Thank you!







Overview Packaging Legislation Of The EU

Name	Description	Status	Main content
EU Packaging Directive	Directive 94/62/EC of the European Parliament and the Council from th 20. December 1994 about packaging and packaging waste	Entered into force on 31 December 1994 Amending Directive (EU) 2018/852 entered into force on 30 May 2018	 Objective: Harmonisation of national measures for the disposal of packaging and packaging waste Introduction of producer responsibility Introduction of recovery systems
EU Waste Framework Directive	Directive 2008/98/EC of the European Parliament and the Council from the 19 November 2008 about waste and the repeal of certain directives	Entered into force on 12 December 2008 Amending Directive (EU) 2018/851 entered into force on 30 May 2018	 Establishing a framework for dealing with waste in the EU Objective: To protect the environment, human health and resources Defining a new five-tier waste hierarchy Introduction of the concept of "extended producer responsibility" Recycling rates for municipal waste (55 percent) by 2025
EU – Single- Use Plastics Directive	Directive 2019/904/EU of the European Parliament and of the Council from the 5 June 2019 about reducing the impact of certain plastic products on the environment	Entered into force on 2 July 2019 (Implementation of EU countries by 3 July 2021)	 Market restrictions/prohibitions for certain single-use plastic products (e.g. cotton swabs, plastic plates) From 2025: 25% recycled material for PET beverage bottles Obligation to label Awareness raising Extended producer responsibility



Repak Members' Plastic Pledge Annual Report 2020 - **Key Highlights**

Brian Walsh, Packaging Technologist, Repak Ltd





Introduction



FIVE KEY OBJECTIVES



Prevent Waste

Focus on prevention of plastic packaging waste by minimising single use packaging and promoting reuse.



2. Support the Circular Economy

Support Ireland to deliver the Circular Economy plastic packaging recycling targets of: 50% of all plastics recycled by 2025 and 55% of all plastic packaging recycled by 2030, as set out by the European Commission.



3. Simplify Polymers

Reduce complexity within the plastic packaging supply chain by simplifying polymer usage and eliminating non-recyclable components in all plastic packaging by 2030.



4. Use Recycled

Help build the circular economy for used plastic packaging by increasing the use of plastic packaging with recycled content.



5. Avoid Food Waste

Ensure the reductions in use of plastic packaging do not jeopardise opportunities to achieve Ireland's goal of a 50% reduction in food waste by 2030, as set out in Ireland's Food Waste Charter.

Sign up today at https://repak.ie/members/plastic-pledge/



Collaborating

> Shaping the way in which we address the plastic challenge through our quarterly working group.

Highlighting Achievement

Our 3rd progress report again highlights over 200 programmes that businesses can potentially adopt or take learnings from.

Repak Members' Plastic Pledge

Supporting

- Support available through our Packaging Site Surveys or Virtual Workshops.
- Coming Soon our updated Packaging Design Guide including design for recycling guidance for soft plastics.

Rewarding

Signatories can enter to win a Pakman Award in the Plastic Pledge category*

^{*} https://pakman.ie/enter-awards



Thank You

Participating Members*















































BROWN THOMAS | ARNOTTS







Working Group Partners & Stakeholders













2020 Report Highlights





Over 23,000 tonnes of plastic packaging waste reduced or replaced since 2018.

Average reduction of 18.6% on projects reported.

1. Prevent Waste

Focus on prevention of plastic packaging waste by minimising single use packaging and promoting reuse.

Over 55 million avoidable plastic items removed (including many SUP items in advance of July 2021).





Average recycling rates for plastic packaging at business premises reported at 67%.

2. Support the Circular Economy

Support Ireland to deliver the Circular Economy plastic packaging recycling targets of: 50% of all plastics recycled by 2025 and 55% of all plastic packaging recycled by 2030, as set out by the European Commission.

- Engagement with staff around Repak's Team Green initiative.
- Increased use of on pack recycling labels as a means to educate consumers.





3. Simplify Polymers

Reduce complexity within the plastic packaging supply chain by simplifying polymer usage and eliminating non-recyclable components in all plastic packaging by 2030.

- "Red" or "Negative" lists developed by many manufacturers and retailers which aim to exclude difficult to recycle plastics.
- One packaging supplier has exited the carbon black PET market (all their black trays will therefore be detectable in MRFs).
- One food supplier has reduced the amount of non recyclable packaging they place on the market by 69%.





4. Use Recycled

Help build the circular economy for used plastic packaging by increasing the use of plastic packaging with recycled content.

- Average recycled content reported for projects was 54%.
- Average amongst beverage PET bottle projects was 36.5% (against a 2030 target of 30%).
- One business removed over 2,000 tonnes of virgin plastic during 2020.





5. Avoid Food Waste

Ensure the reductions in use of plastic packaging do not jeopardise opportunities to achieve Ireland's goal of a 50% reduction in food waste by 2030, as set out in Ireland's Food Waste Charter.

- Due diligence continues to ensure that plastic packaging is reduced in a manner that does not increase food waste.
- Many businesses are signatories to the EPA's Food Waste Charter.
- Food Cloud utilised for the donation of over 4.1 million meals where product is short dated.



Opportunities

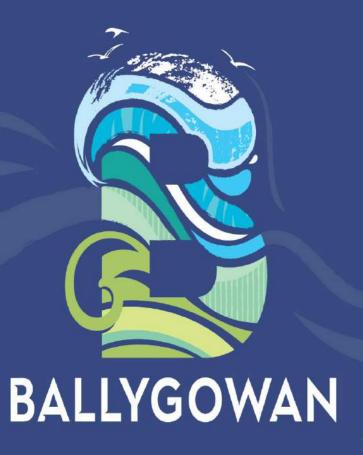
- If you are doing great work please tell us about it.
- Submissions to the Plastic Pledge Report should contain key figures (e.g. tonnes reduced) to ensure that we don't underestimate achievements.
- Consistency of reporting is important to understand accumulated achievement.
- Well managed reusable and returnable packaging systems not a big feature – significant circular economy opportunity.
- > Feel free to put in the chat what further supports and initiatives you would like to see under the Repak Members' Plastic Pledge.





Thank You





Working towards a World Where Great Packaging Never Becomes Waste

Ballygowan Plastic Reduction

How it started

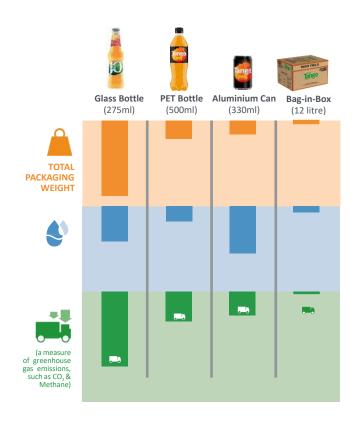


How it's going





Plastic Packaging Can Have Sustainability Benefits



A good sustainability strategy will consider all impacts on the environment.



A Balanced Approach to Tacking the Problem

The best options help avoid global warming, protect scarce resources, prevent littering and protect the natural world.



PREFERRED

IT'S ABOUT
KEEPING
PACKAGING
IN THE
ECONOMY
AND
OUT OF THE
ENVIRONMENT



Sustainability is a Priority for Britvic

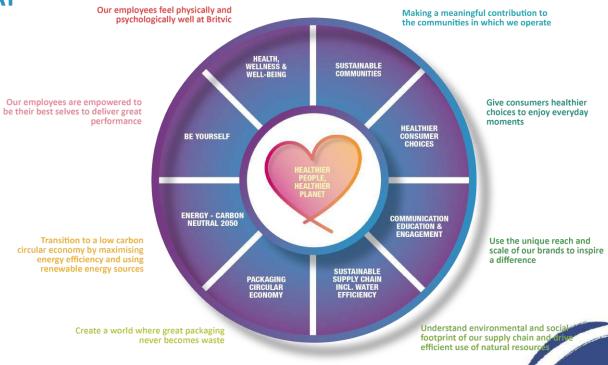
"HEALTHIER PLANET" IS AT THE HEART OF BRITVIC'S FUTURE SUCCESS

BRITVIC PLC'S
BIG 2025
PLANET
COMMITMENTS

REDUCE DIRECT CARBON EMISSIONS BY 50%

PACKAGING 100% RECYCLABLE >50% RPET

REDUCE PACKAGING PER SERVE BY 20%





Britvics Sustainable Packaging Strategy

MISSION:

A WORLD WHERE GREAT PACKAGING NEVER BECOMES WASTE

REDUCE

- Minimise all our packaging weights per serve, whilst ensuring there is no compromise to quality or safety
- Divert all our factory waste away from landfill

RECYCLE

- Design packaging which is fully and easily recyclable or re-usable
- Step-change our use of recycled materials in our packaging
- Enthusiastically support proven measures to improve recycling rates.

REFRAME

- Engage all stakeholders pro-actively to create a circular economy.
- Use the unique scale and reach of our brands to get the Island of Ireland recycling.

REINVENT

- Innovate 'beyond the bottle'.
- Deploy scale innovative customer/channel solutions to enable our customers to make a difference
- Innovate low impact packaging, but only deploy them when we are convinced they do not bring net negative unintended consequences



How we started with Ballygowan

MISSION:

A WORLD WHERE PACKAGING NEVER BECOMES WASTE











January 2021 – Launching our 100% rPET Bottles



BALLYGOWAN

Making a Difference to our Environmental Footprint





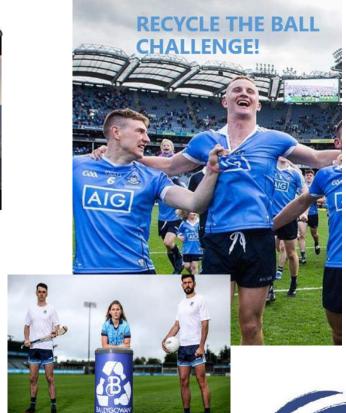
Encouraging our Consumers to Close the Loop





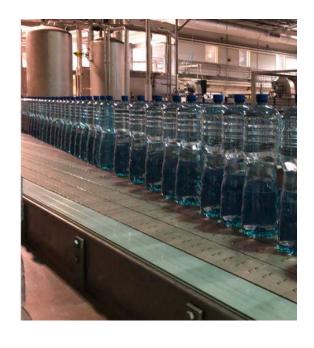








Learnings from our Journey So Far



- Get senior buy-in & commitment to investing in Sustainability from the start.
- Do your homework the answers will not always be obvious. Look at the full environmental footprint & get external help if necessary.
- Work with experts in the area to deliver win-win solutions.
- Set realistic timelines and start making small improvements today.
- Think about your consumers and how you will bring them on the journey with you.
- Always keep one eye on the future!







Plastic Recycling

Presented by Ciara Carolan

Est 2011

What we do

In Nov 2011 ADN Materials Ltd was established to Specialise in recycling plastic Film and hard plastic products into a pellet, end of waste material.

The process involves the use of Shredders, Granulators, washing plants and an extruder. A pellet is created. The process is very heavy industrial, operating 24hrs a day five days a week.

These pellets are sold into the plastic product manufactures market. We sell our products into a number of countries including Ireland, UK, Italy and Turkey.



ADN Materials Ltd recycle a range of Products Including,

- LDPE Films from both back door production waste and Agriculture film. This is now 80% of our business.
- PP and PS products mainly plastic containers and buckets
- HDPE Pipe Grade Material both on contract and for sale in the open Market.

Problems faced with recycling of plastic

- Once a plastic product has two or more plastic types attached to it, in most cases recycling can be problematic.
- Our Main business is now focused on Agriculture and backdooor LDPE.
- ► The reason we have reduced the intake of the other plastic types is because these plastic items including PP are getting harder to sort and recycle.
- ► The main reason that we now recycle approx 80% LDPE is because we know we can get consistent supplies of the one type of material. It allows us create a material data specification which is consistent for our customers.
- It is not so much the dirt of the material that is a major element in our process but the mixture of different plastic types that can cause major issues.

What our end customers requires in quality.

- ► The most important requirement that our customer requires is that the material is all one material type.
- As each customer is making their own specific product they require consistent supply and quality.
- If mixed material where to entre there production system it would cause serious issues.

Thank You

