



The Question of Plastic: A Hot Topic of our Time

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Agenda



1. Introduction
2. Why is sustainability important to your business?
3. What's happening: External Factors to Consider
4. Legislation Update...and what's coming down the tracks.
5. What makes a product environmentally friendly?
6. Compostables v. Recyclables
7. Questions/discussion





Bunzl Ireland are a leading specialist distribution Group supplying a broad range of non-food consumable products. Our 4 Irish divisions provide a range of cleaning, hospitality, non-food consumable and safety products.

Why is sustainability so important?

Pacific dump of plastic waste is now bigger than France, Germany and Spain combined

Most of the dump is made up of tiny fragments of plastic smaller than 5mm.

Mar 23rd 2018, 7:42 AM 31,903 Views 60 Comments Share 750 Tweet Email 3

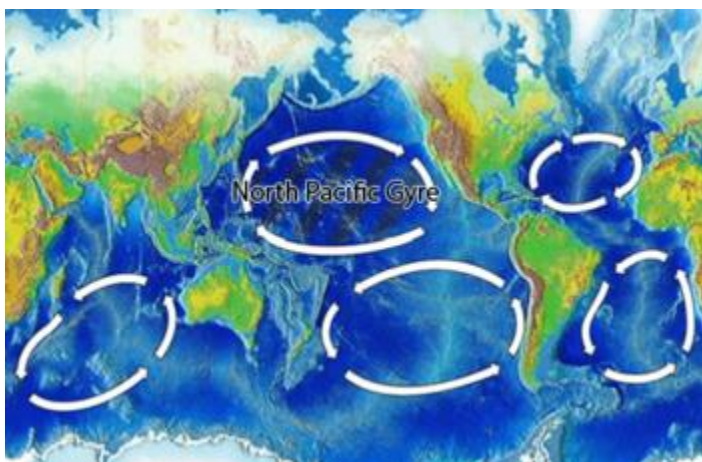
THE VAST DUMP of plastic waste swirling in the Pacific Ocean is now bigger than France, Germany and Spain combined — far larger than previously feared — and is growing rapidly, a new study has warned.

Researchers based in the Netherlands used a fleet of boats and aircraft to scan the immense accumulation of bottles, containers, fishing nets and microparticles known as the “Great Pacific garbage patch” (GPGP) and found an astonishing build-up of plastic waste.



Rubbish on the beach on the south side of Hong Kong.

Image: AFP/Getty Images



Extinction Rebellion protests blocked large parts of central London for two weeks in April. (Source: Getty)

What our customers are seeing in the media...



'Biodegradable' plastic bags survive three years in soil and sea

Study found bags were still able to carry shopping despite environmental claims





▲ A plastic bag labelled biodegradable after three years in the marine environment. Photograph: Imogen Napper


Plastic bags that claim to be biodegradable were still intact and able to carry shopping three years after being exposed to the natural environment, a study has found.

The research for the first time tested compostable bags, two forms of biodegradable bag and conventional carrier bags after long-term exposure to the sea, air and earth. None of the bags decomposed fully in all environments.


Why is sustainability so important?

- **The Business Case** for sustainability is undeniable. Operating sustainably isn't just a nice thing to do, it is business critical.
- **Informed Consumers:** The **drivers** for companies to act ethically and with integrity is now crucial for their reputations when dealing with *informed* employees, consumers, communities, investors and other



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Sustainability Is Changing How We Do Business ... For the Better

By Melissa Zehner, Business.com Writer | Last Modified May 23, 2019

Patagonia. TOMS. Warby Parker. REI. Everlane. Sustainability has become almost synonymous with credibility in business. Consumers, investors and regulatory agencies are more demanding than ever before when it comes to socially and environmentally responsible business practices.

The idea of going green to succeed in business is a relatively new one. In previous generations, it was enough to simply sell a quality product or service. Customers didn't ask about supply chains, livable wages or carbon footprints. Whether a company was run ethically was entirely up to its board of directors.

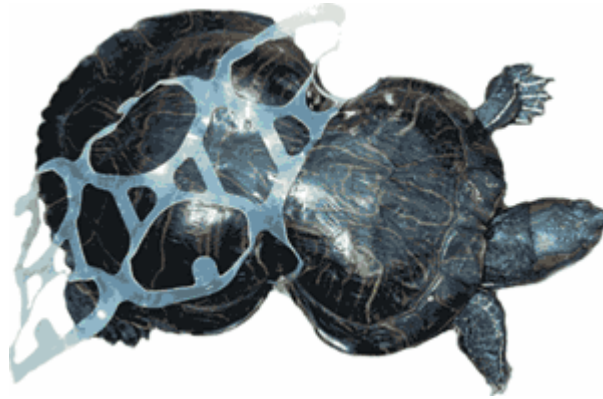
This all changed once millennials began to flex their buying power. And, yes, millennials actually do have buying power – they may often be labeled as perpetually broke, but millennials make up one-quarter of our population and are [expected to spend \\$1.4 trillion](#) in 2020.

While our nation's avocado-loving youth has been accused of killing everything from cereal to homeownership, millennials have undoubtedly [brought sustainable business practices](#) into the spotlight. Their penchant for living green and buying local, compounded with growing concerns about climate change and social equality, has prompted a growing number of businesses to find more ethical, sustainable ways to be successful.

Here's how sustainability is transforming business all the way from the consumer to the investor.



What we are
currently
facing...
Ocean Plastic
and Climate
Change



EU Single-use Plastic Directive

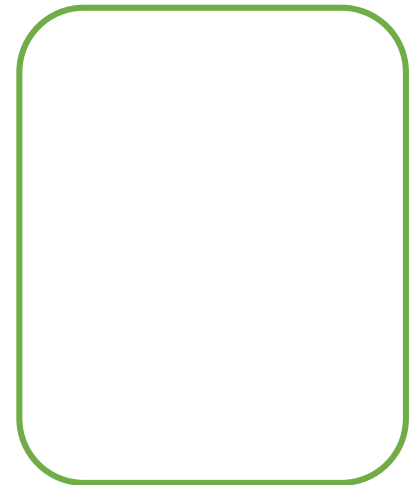
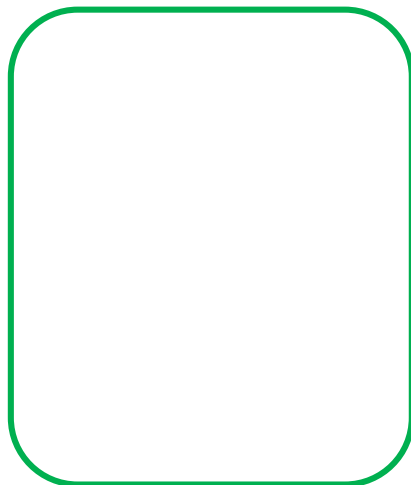
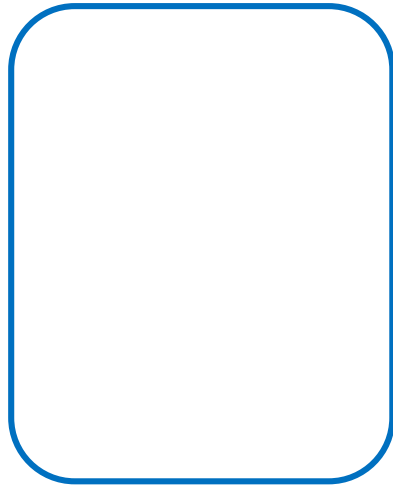


EU PLASTICS STRATEGY

MARCH 2019

By 2021

BANNED LIST



Implications of the EU SUP Directive

- **A ban on selected single-use plastic** products such as cutlery, cotton bud sticks, plates, straws, stirrers, plastic food containers, etc. will be applied from 2021.
- Marketing, distribution or consumption of products made of polystyrene cups and beverage containers will be prohibited.
- Certain **product design requirements** have also been included in the Directive. From 2024, Beverage containers that have plastic lids or caps will be placed on the market only if their lids or caps remain attached to the container during its usage period.
- **Extended Producer Responsibility** schemes will be applied to products such as tobacco filters, lightweight plastic carrier bags, wrappers and fishing gear. By December 2024, producers must cover the cost of collection, transport, treatment and clean-up of waste from these products.
- **A 90% collection and recycling target for plastic bottles** by 2029 (77% by 2025) and the introduction of design requirements to connect caps to bottles, as well as targets to incorporate 25% of recycled plastic in PET bottles from 2025 and 30% in all plastic bottles as from 2030.



What makes a product environmentally friendly?



What makes a product environmentally friendly?

We must take a HOLISTIC view of whether a product is eco friendly.

Other important aspects to consider include:



Where is the product made?

✓



Water Footprint



Sustainable Certifications



Renewable Resources



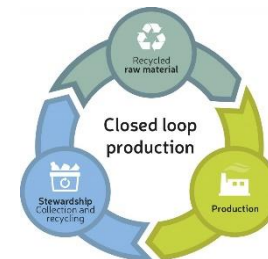
Chemical Footprint



Use of Palm Oil



How is the product transported throughout it's life cycle stages?



What are the product's end of life options? Is it a widely recyclable material

What Makes a Packaging Product Recyclable?



It is very important to recognise and understand the difference between *recyclable* and *recycled*.

Recyclable means that a product or material is capable of being recycled under certain conditions. A product or material can either be widely recyclable or require localised/specialised recycling

Recycled means that the recyclable product or material will actually be recycled.

Theoretically all packaging products are recyclable. However, what can often be confusing for customers and end users is that just because a product or material is recyclable does not mean that it will actually be recycled.

There is a standard recycling formula which can be used to work this out.

Volume + Quality + Price = Recyclable.

Volume: There must be enough of that material (by weight) moving through the waste management system to justify the cost of segregating it during the sortation process.

Quality: A product must be the right shape, size, colour, with minimal food contamination and made from a good quality material.

Price: The product material must have a resale value high enough to cover the cost of recovery, transport and a little bit of margin left over for the waste operator.

Any product or material must have an appropriate balance of all three, volume, quality and price, to be actually recycled.

Compostable Packaging: The Facts.



Compostable packaging can be the more environmentally responsible choice depending on the circumstances of use.

The Facts

There are two environmentally responsible lifecycle aspects to compostable packaging:

1. Being made from renewable resources
2. Can be composted at its end of life.

Compostable packaging is usually made from two material types, either bagasse or PLA (poly-lactic acid). PLA is a type of plastic which is made from plants. This is referred to as being bio-derived. Both bagasse and PLA come from renewable resources which can be continuously replenished.

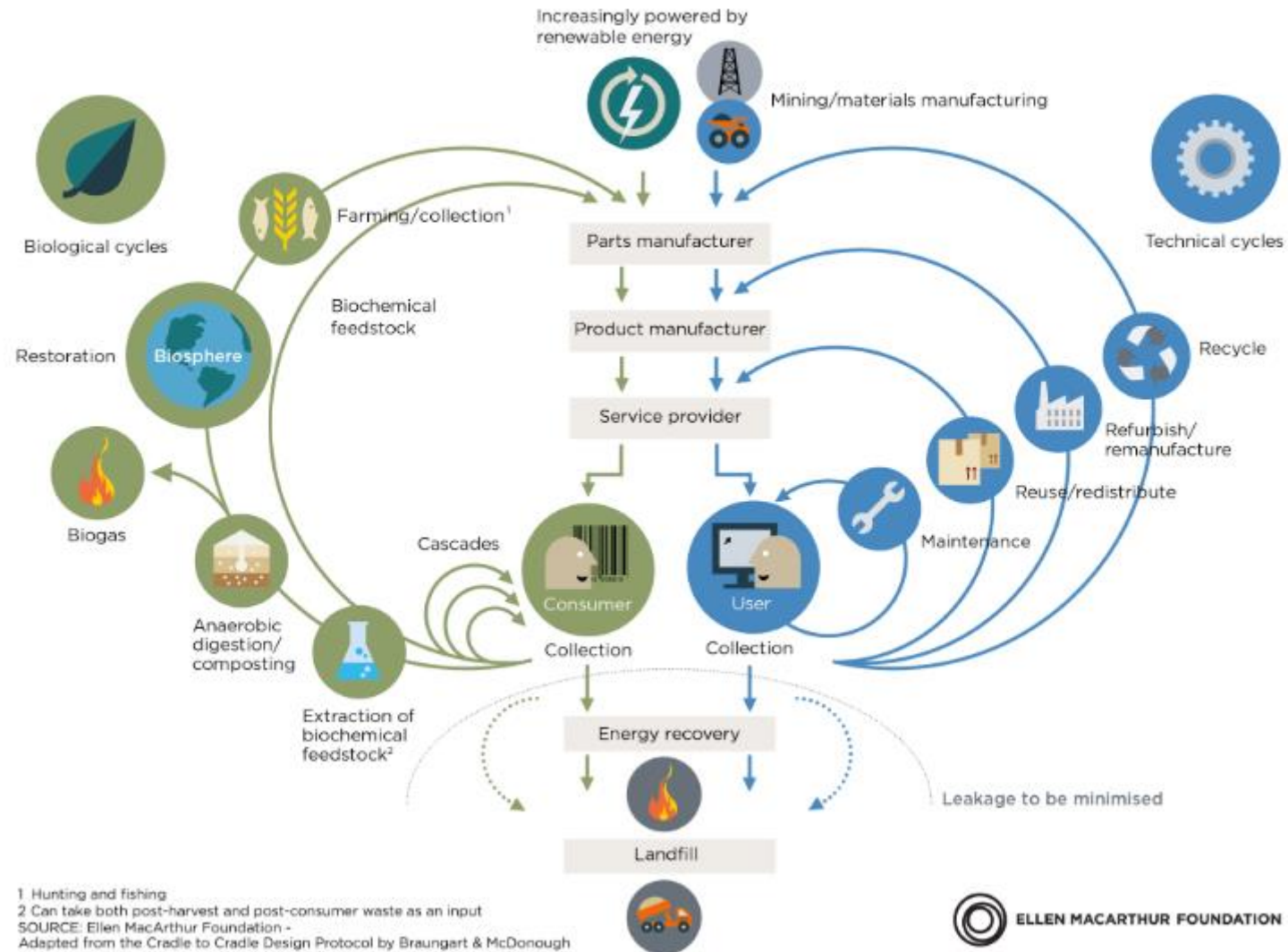
The Myths

PLA is still a plastic and if not treated correctly at its end of life, will react in the same way as a traditional plastic and can potentially pollute the environment in the same way as a fossil based plastic.



Becoming Material Responsible

CIRCULAR ECONOMY - *an industrial system that is restorative by design*



Packaging is NOT inherently bad. It's what we do or don't do with them that matters.

1. REDUCE

What you can do:

- Offering a range of alternative materials with reduced environmental impact in terms of carbon, water, chemical, and material footprint
- Consolidating materials to either fully recyclable or fully compostable ranges
- Removal of unnecessary and/or unrecyclable materials
- Introduction of dispensers to prevent excessive use

2. REUSE

-
-
-



3. RECYCLE

- Offering products which are fully recyclable and recycled
- Offering products which contain recycled content
- Diving innovation to increase the use of recycled materials used in product manufacture

Are Biodegradable Materials Environmentally Friendly?



The term *bio-degradable* is often associated with compostable packaging. It is easy to become confused between the two.

Just because a product is biodegradable does not mean that the product is also compostable or environmentally friendly.

The term 'biodegradable' simply means that a material or product is bio-derived (e.g. made from a natural resource) and will 'break down' over time.

It does not indicate:

- How long it will take
- What environmental circumstances are required
- What the product will breakdown into.

Biodegradable products are not harmless

- They do not break down in landfill
- Some create micro-plastics
- Some leave behind chemical residue and heavy metals

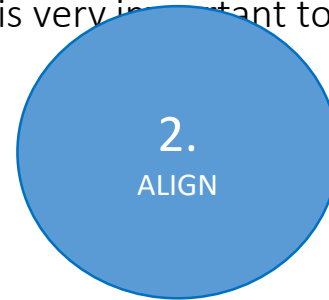
Which is the Better Choice - Compostable or Recyclable Packaging?

It totally depends on the nature of the environment where the product is being used.

Whichever material choice customers make it is very important to:



- use either ALL COMPOSTABLE or ALL RECYCLABLE.
- Mixing = consumer confusion + high levels of bin contamination
- This prevents either material stream from being composted or recycled.



- Choose the option that best aligns with your waste management capability.
- For compostable packaging you must have a food waste bin and a connection with a licensed In Vessel Composter or Anaerobic Digestion Commercial Composter.
- Recyclables require a mixed recycling bin.



- CLEARLY LABEL which products need to go in which bin.
- DO NOT ASSUME CUSTOMERS KNOW what a mixed recyclable or compostable product is.
- Consider introducing BOLD AND CLEAR LABELS on the products themselves.
- Again, consumers often mistake recycling and composting symbols.



Resource Station – Best Practice



What Our Industry Must Achieve

- Currently the least engaged, least informed and least willing are responsible for the most complicated end of life stage
- Understanding the detail of our material responsible choices and consolidate
- Learning from history. What's happening with plastics will happen with compostable packaging.
- Shifting from recyclable and compostable to *recycled* and *composted* with transparent collections
- Effective labelling of products.

‘If you think you are too small to make a difference, try sleeping with a mosquito.’

— **The Dalai Lama**



Q & A

If you'd like any further information or advice on sustainable packaging please don't hesitate to contact me.

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