



# Can the Packaging Industry become solution to the Ocean Plastic Pollution?

Dr Geoff Brighty









Founded in 2009

UK's first plastic pollution NGO

First seven years: production of the film A Plastic Ocean.

#### Our focus:

- Education
- Science and Policy
- Sustainability











# Plastic Fantastic





# Durable Lightweight Strong Flexible Clean Multiplicity of uses



## Millions of Legitimate Uses















#### **Ocean Plastics**

#### An orphan problem

- What is the 'problem'?
  - Material?
  - Design?
  - Source?
  - Stewardship?
  - Economics?
  - The Plastics 'System'?
  - Quantity?

# 38 million pieces of plastic waste found on uninhabited South Pacific island

Henderson Island, part of the Pitcairn group, is covered by 18 tonnes of plastic the highest density of anthropogenic debris recorded anywhere in the world



38m pieces of plastic found on uninhabited Henderson Island

Source: The Guardian

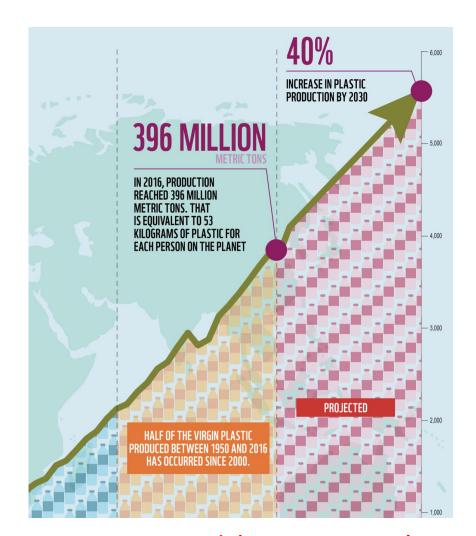




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Source: WWF

All of the above... How do we prevent harm, and recover the value?

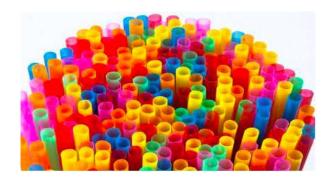


# What plastics are we most concerned about

















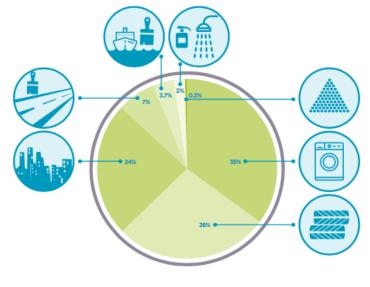




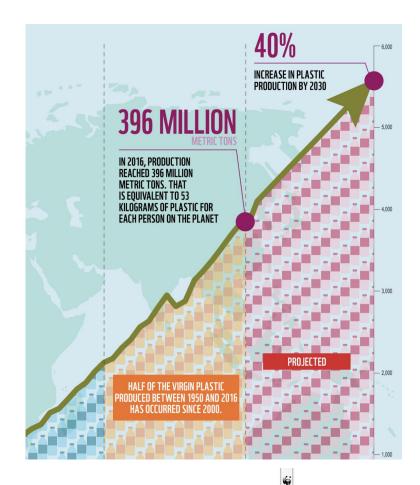
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#### GLOBAL RELEASES OF PRIMARY MICROPLASTICS TO THE WORLD OCEANS

BY SOURCE (IN %).







Source: WWF



WARNING: Plastics are polluting nature, endangering wildlife and taxing natural systems. It is entering the food we eat and the air we breathe.









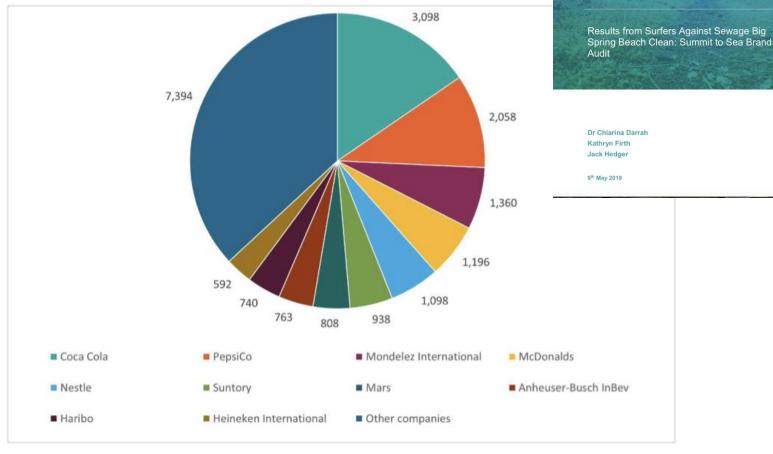
**Analysis of Branded Items** 

found on UK Beaches



3 of the top 5 items of microplastic were packaging related

Figure E - 1: Shares of Branded Items by Parent Company





## How are we doing?

- 46 Own-Brand items in UK major supermarkets
- Glass, plastic, card, tins.
- Tesco/Waitrose 60% readily recycled by households; Morrisons – 39%...
- Overall only 58% was correctly labelled for recycling - Asda – 80% - M&S 43%

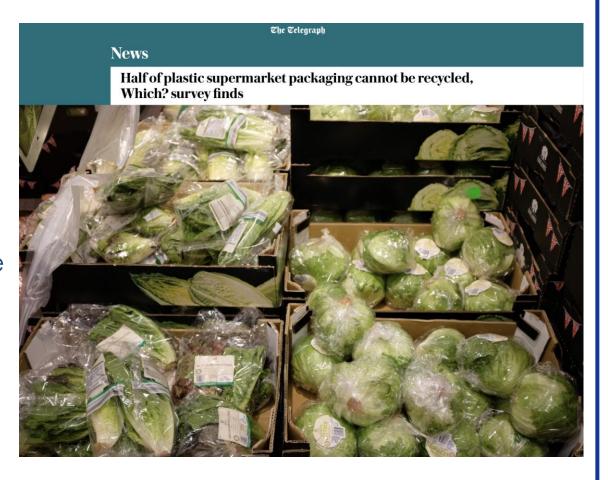
#### **Conclusions:**

- Little consistency in materials being used for the same product
- Labelling errors

#### Outcomes:

Customers confused, angry, discouraged Packaging ends up in landfill or EFW More costly for loose fruit and vegetables





Source: Which 2019





Plastic Oceans UK

#### Living Sustainably with Plastic

A Theory of Change

Embedded

Complex

Nuanced









#### **Role of Business**

- The **role** of a **business** is to produce and distribute goods and services to satisfy a public need or demand.
- Requirements
  - Meet customer expectations
  - Deliver shareholder value
  - Meet regulatory requirements:
    - Finance
    - Governance
    - Environment
    - Staff health and safety
    - Etc...

#### The licence to operate





#### **Business practice in a former age**

Society moves on – so **must** business if it wants to be sustainable













So how will these be judged?





#### **Role of Sustainable Business**

- The **role** of a **business** is to produce and distribute goods and services to satisfy a public need or demand.
- Businesses also want to be sustainable
  - Shareholder value = longevity
  - Licence to operate = rules, reputation
  - Adaptable to circumstances = externalities
- Corporate Social Responsibility (CSR) is "a **business** practice that involves participating in initiatives that benefit a **society**.
- Requirements
  - Meet customer expectations
  - Meet regulatory requirements
  - Meet societal expectations, and have purpose
    - Support longevity, reputation and embrace externalities.

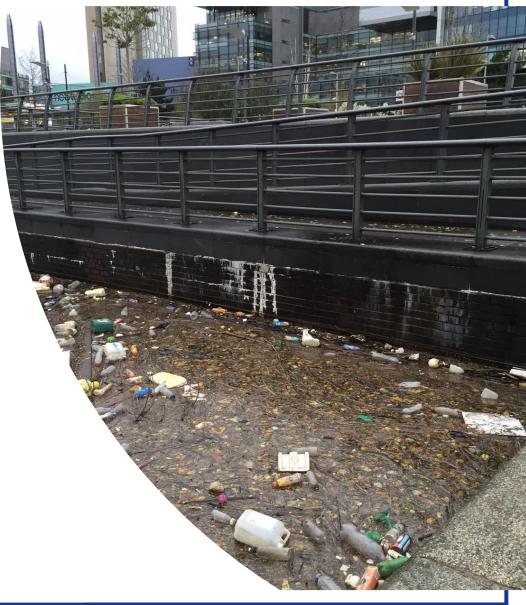




Business will need to consider the **problems** and how best to adapt to these **externalities**:

- Changing societal attitudes;
- Government regulation;
- Customer expectations;
- Market changes; developing countries?
- Investor questions;
- As an industry, or individual business, will you be







# Critical Externalities: Individual Attitudes

- Charismatic animals affected
- Dismay with excess packaging
- Distrust of the recycling system
- Health effects suspected
- Regular updates in the media

Impacting on 'licence to operate'







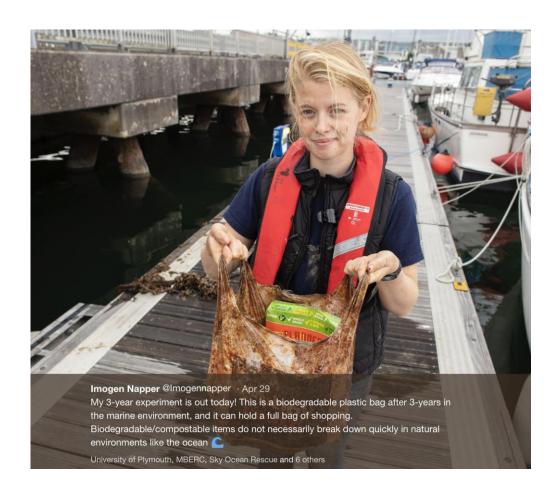


# The impacts are chiming with the public mood, which is changing <u>attitudes</u>, and <u>behaviours</u>

Carrington
Environment
editor

@dpcarrington
Wed 5 Jun 2019
16.50 BST

3565







▲ The Swedish climate activist Greta Thunberg addressed British MPs in April. Photograph: Jonathan Nackstrand/AFP/Getty Images

Public concern about the environment has soared to record levels in the UK since the visit of Greta Thunberg to parliament and the Extinction Rebellion protests in April.



# Critical Externalities - Is plastic a



#### waste?

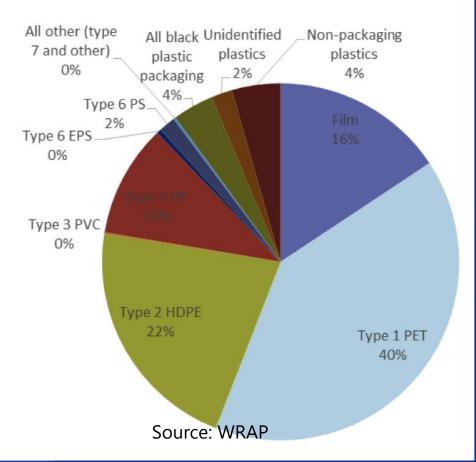
Predominantly a linear system

Production: manufacturers → product/packaging → retailers

Post-Consumer: collection → reuse/recycling/recovery

- The material
  - Sorting and recovery:
    - type
    - colour
    - complexity
    - contamination
    - Value and economics

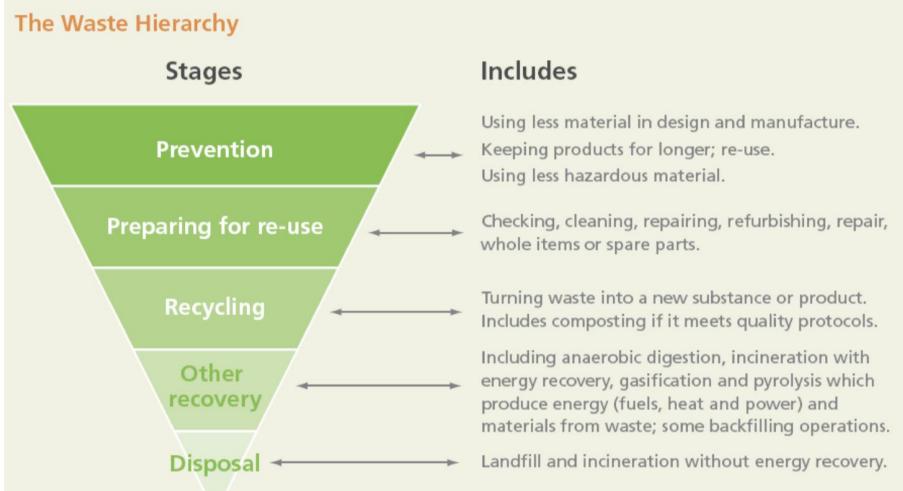
How can you help make the system work to drive to recovery?





# What can you do to drive plastic up the Waste Hierachy?











## Where is your packaging heading?







Week 191.

Marine species do not

- Wear clothes
- brush their teeth
- drink milk or tea or eat biscuits
- shampoo

So no

- detergent powder
- tooth paste
- milk pouches
- shampoo sachets

Why Humans are forcing them to adopt our habits.



I am on my way to Mumbai today to meet my friend @AfrozShah1 and other great activists. This is the plastic tsunami hitting this fantastic Indian a city. This is what Afroz and his colleagues are fighting and defeating. 🙏 👍

Following

Ashwin



2:30 AM - 24 Jun 2019





@mahimbeach Week 94 There's strength in numbers. Great turnout by volunteers from @METedu @bombayscottish and @MCGMswm staff. An efficient clean-up thanks to the excavator lent to us by @AfrozShah1 and trucks by @MCGMswm . Let's get this done! See you next week! @DighavkarKiran





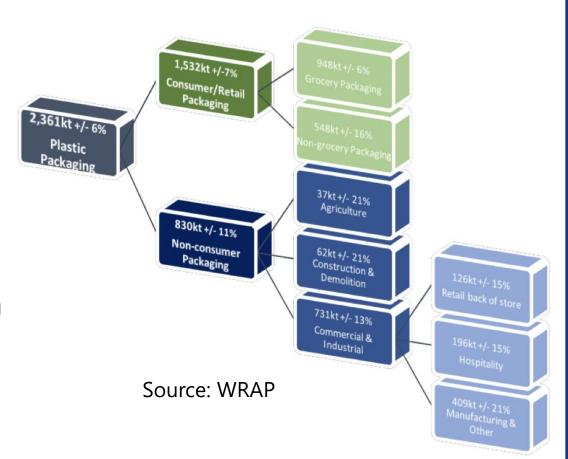


## Critical Externalities: Systems

change Plastic consumption is burgeoning, overwhelming waste management systems, and driving down recovery

#### **UK Government response:**

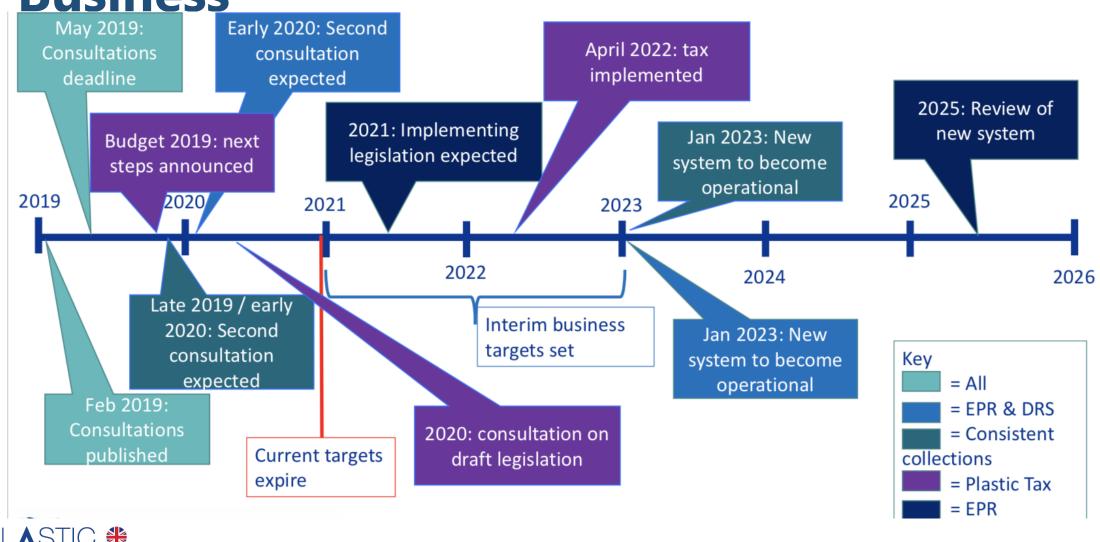
- Reduce virgin plastic, will lead to minimum recyclate/tax
- Enhance waste collection and recycling will change plastic placed on market
- Ramp up recovery of plastic from the market
- Decide on deposit return schemes
- Deliver 25 Year Environment Plan



Are you engaged with this?



# **UK Government response will impact Business**





# The UK Plastic Pact – 'retail' business and its supply chain achieving improved resource efficiency





#### **Plastic Pact Members:**

### major brands have made the commitment







# How should the Packaging Industry respond? Each business customer - will have its own 'plastic

Each business customer - will have its own 'plastic challenge':

- Drive the change with your customers and waste industry
- Design for end of life and Resource Efficiency:
  - **why** would you produce packaging that can't be recycled easily?
  - Packaging size, less complex materials,
  - Reflecting local waste management
- Be the innovators #leadership









## A Tiered Approach...

No Plastic Avoid – better, more sustainable

alternatives – less single use

Less Plastic Less packaging

Better Plastic Don't use unrecyclable/toxic/harmful

plastic – PVC/polystyrene

Circular Plastic Plastic that can be recycled/upcycled

Reusable Plastic in use for a long time – and that

can be recycled

Measures account for true costs of the

Valued Plastic Impact, and recovery – tax/











Plastic





www.plasticoceans.uk







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