

# Of Policies, Behaviour and Single-Use Plastics

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***There is no natural variation of plastics in the environment. All plastic pollution is the result of human decisions and behaviour, whether they are made by manufacturers, retailers, or consumers.***

***The solution therefore also needs to be found in changing human decisions and behaviour.***



## Throwaway Living

DISPOSABLE ITEMS CUT DOWN HOUSEHOLD CHORES

The objects flying through the air in this picture would take 40 hours to clean—except that no housewife need bother. They are all meant to be thrown away after use. Many are new; others, such as paper plates and towels, have been around a long time but are now being made more attractive.

At the bottom of the picture, to the left of a New York City Department of Sanitation trash can, are some throwaway vases and flowers, popcorn that pops in its own pan. Moving clockwise around the photograph come assorted frozen food containers,

a checkered paper napkin, a disposable diaper (seriously suggested as one reason for a rise in the U.S. birth rate) and, behind it, a baby's bib. At top are throwaway water wings, foil pans, paper tablecloth, guest towels and a sectional plate. At right is an all-purpose bucket and, scattered throughout the picture, paper cups for beer and highballs. In the basket are throwaway draperies, ash trays, garbage bags, hot pads, mats and a feeding dish for dogs. At the base of the basket are two items for hunters to throw away: disposable goose and duck decoys.

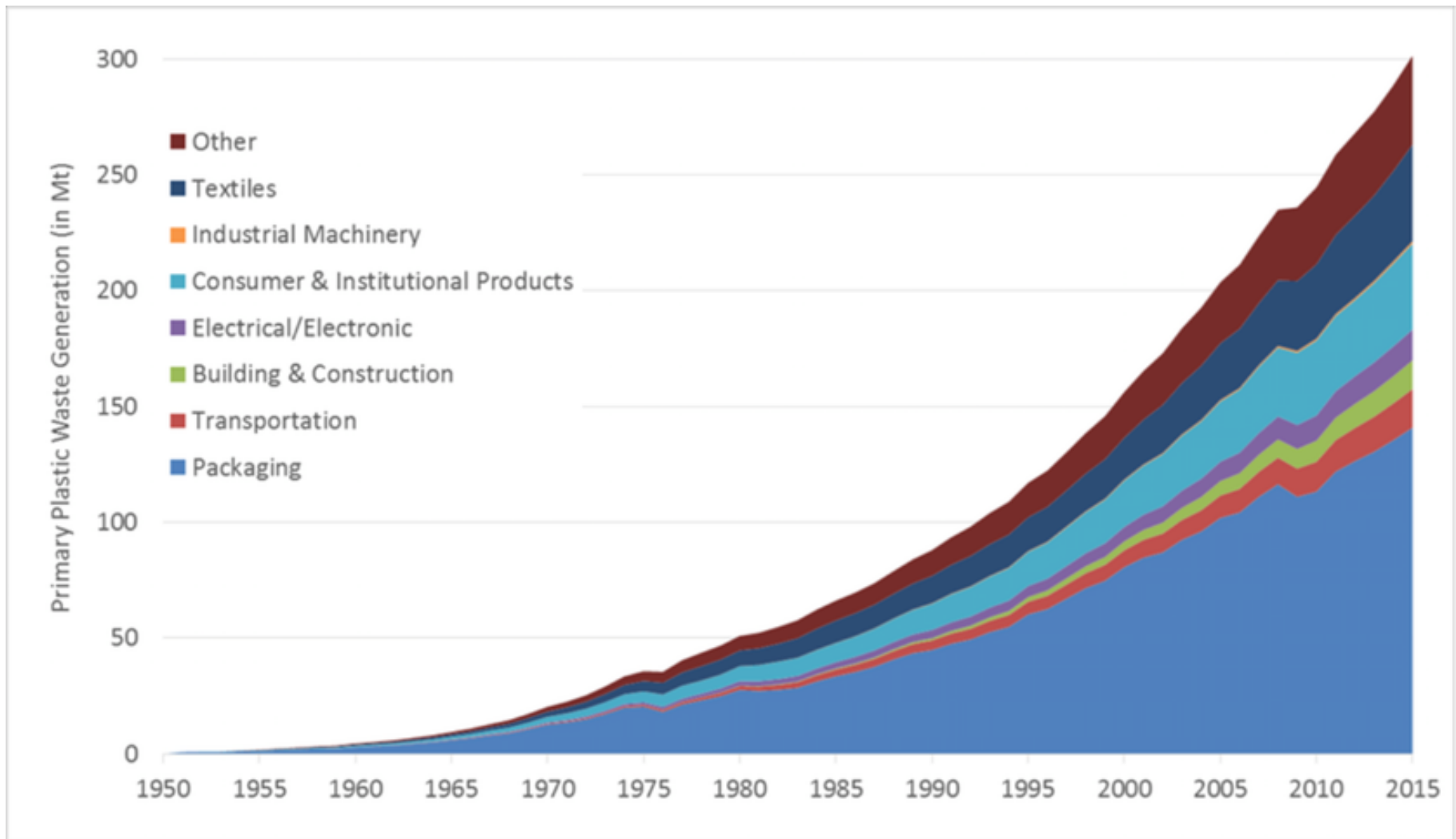
CONTINUED

LIFE



## Throwaway Living

DISPOSABLE ITEMS CUT DOWN HOUSEHOLD CHORES





Source: Creative commons (MichaelisScientists)





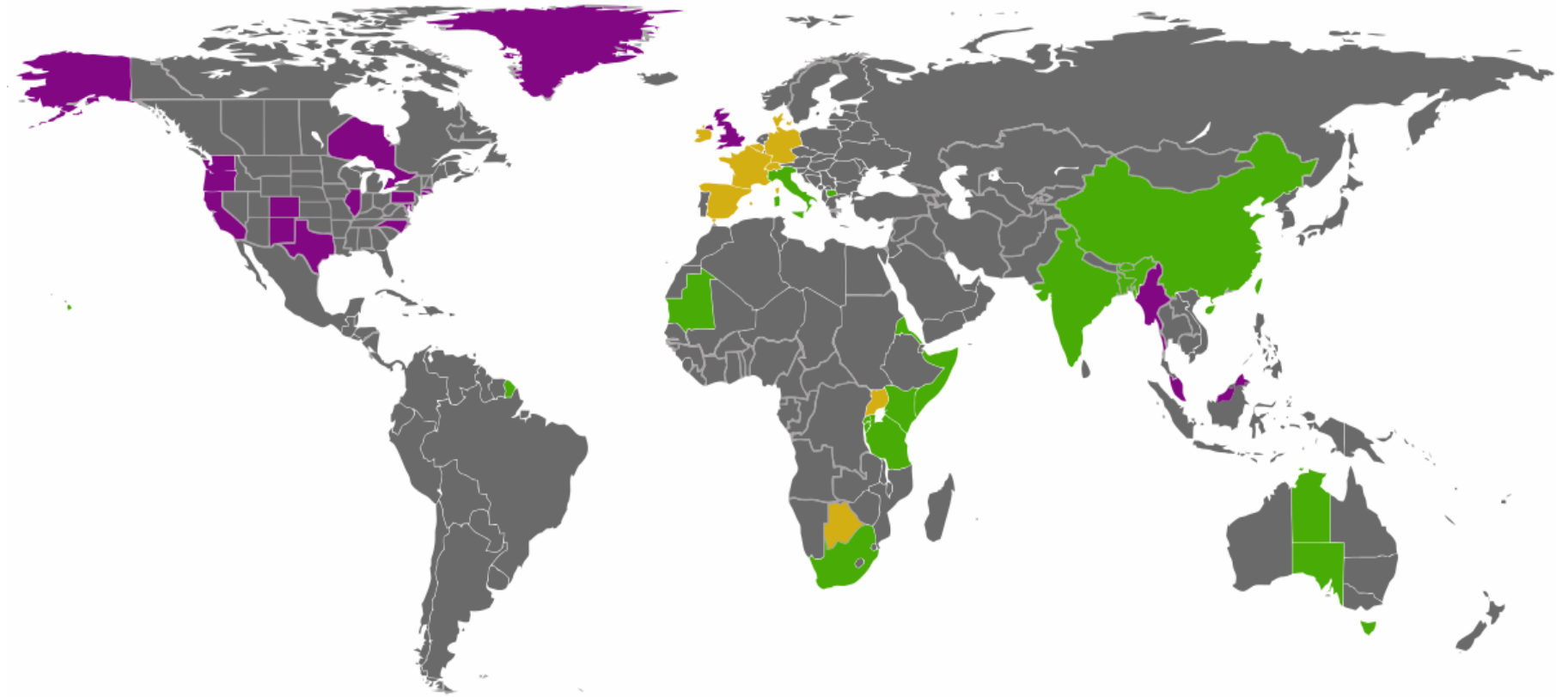
*Source: Creative commons (no attribution needed)*

***Around 28 million tonnes of household waste is generated in the UK every year, of which 4.9 million tonnes is packaging and 7.0 million tonnes is food waste. Carrier bags represent less than 1% of household waste, but...***

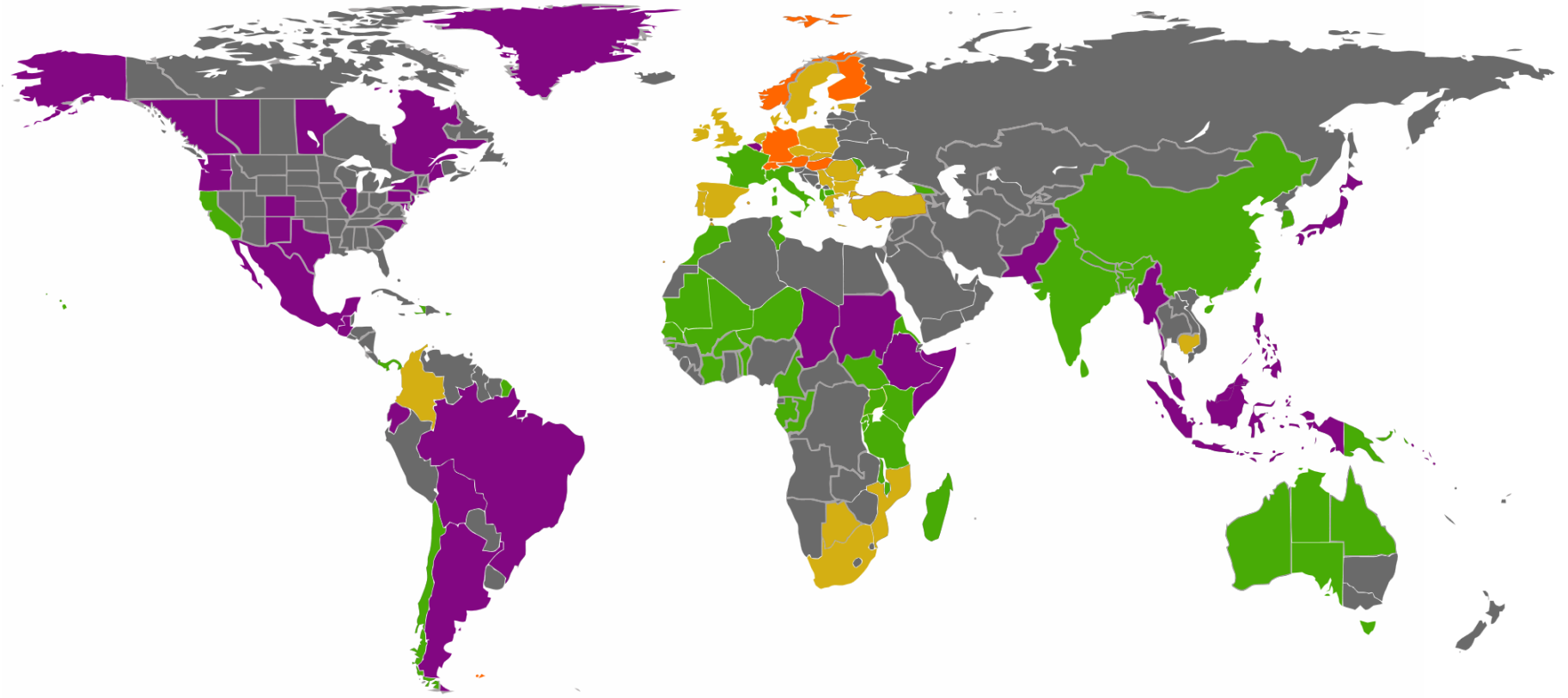




Source: Creative commons (MichaelisScientists)



- Ban
- Part charge or ban
- Fee/levy/tax
- Voluntary charge



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# Scottish Bag Charge

Department  
for Environment  
Food & Rural Affairs



5p  
Plastic bag  
charge

**Large shops in  
England must  
charge 5p for  
single use plastic  
carrier bags from  
5th October 2015**

#reusebags  
To find out more: [gov.uk/carrierbags](http://gov.uk/carrierbags)

# The English Plastic Bag Charge

## Plastic bags

# England's plastic bag usage drops 85% since 5p charge introduced

Number of single-use bags handed out dropped to 500m in first six months since charge, compared with 7bn the previous year

Rebecca Smithers Consumer affairs correspondent

Saturday 30 July 2016 00.01 BST



This article is 3 months old

Comments

2,086

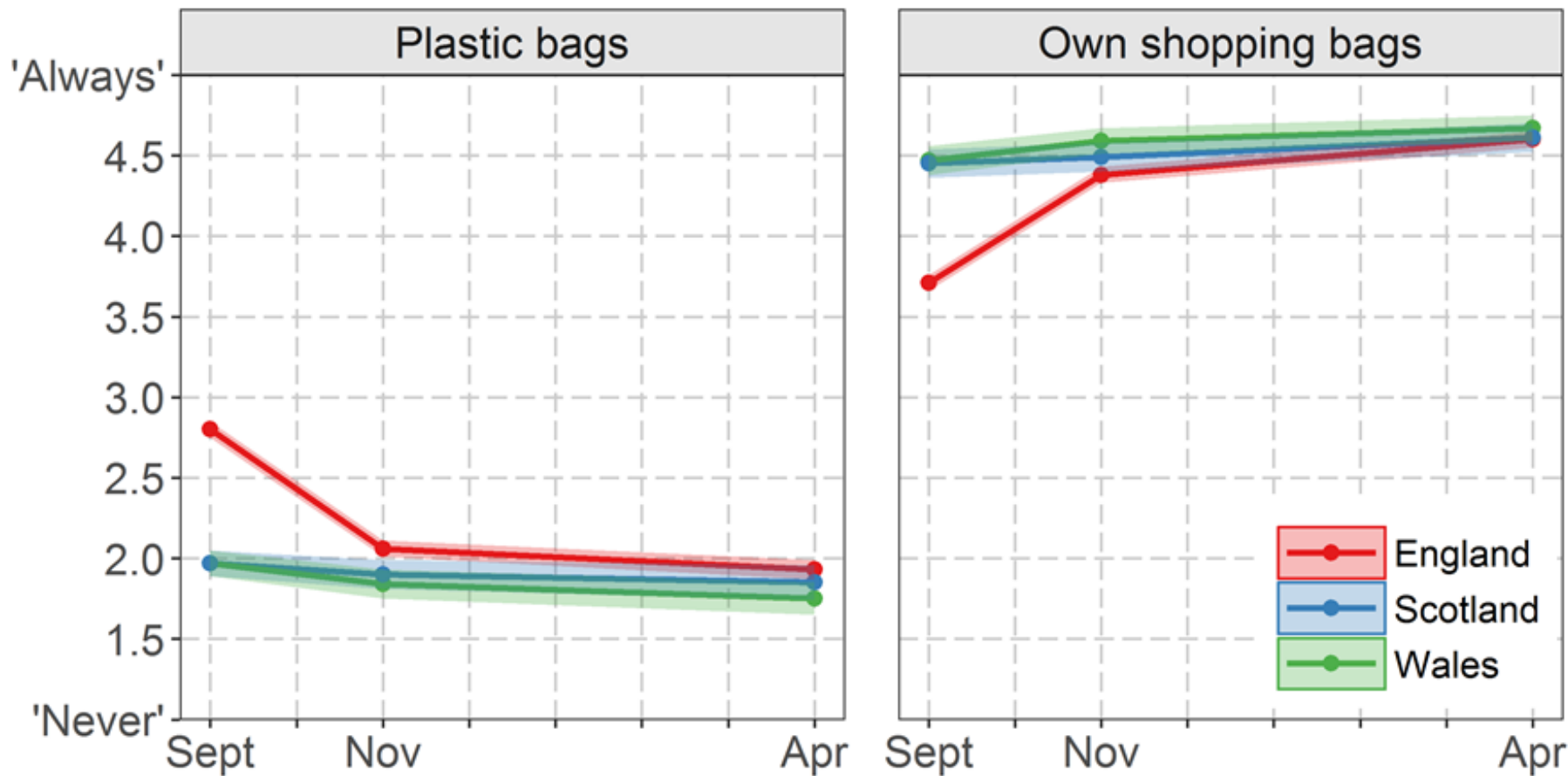
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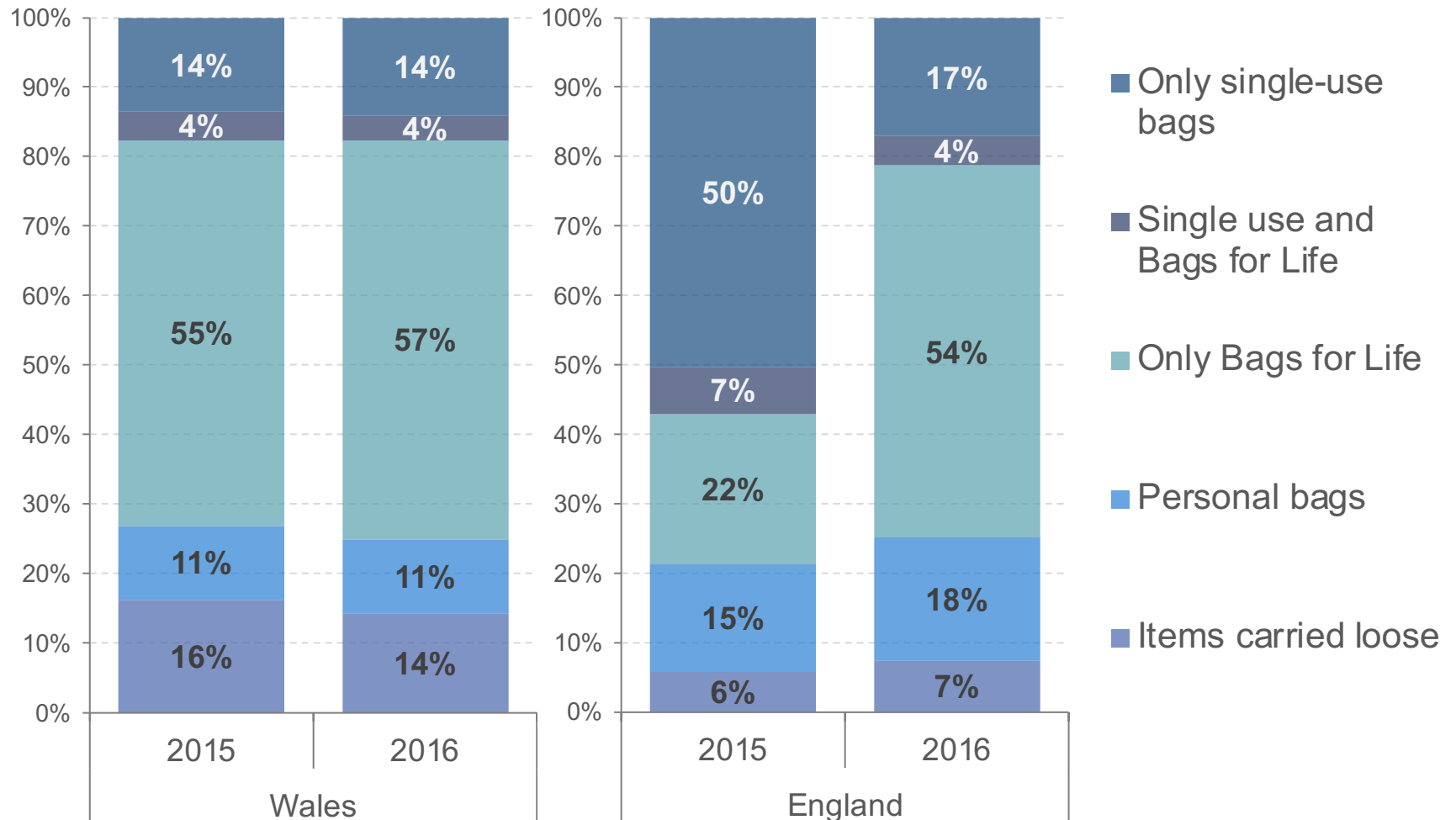
Plastic bag floating underwater at Pulau Bunaken, Indonesia. Around 8m tonnes of plastic flows into the world's oceans each year. Photograph: Paul Kennedy/Getty Images

Defra 2016

# The English Plastic Bag Charge



# The English Plastic Bag Charge



***The plastic bag charge is (arguably) the most successful behaviour change policy in recent history...***



# The Incredible Power of 5p



## Provide Alternatives



## Information campaign

No thanks!  
**I CARRY  
MY OWN  
BAG**

## Ban



## Economic instruments



## Values/Moral change



## Social modelling



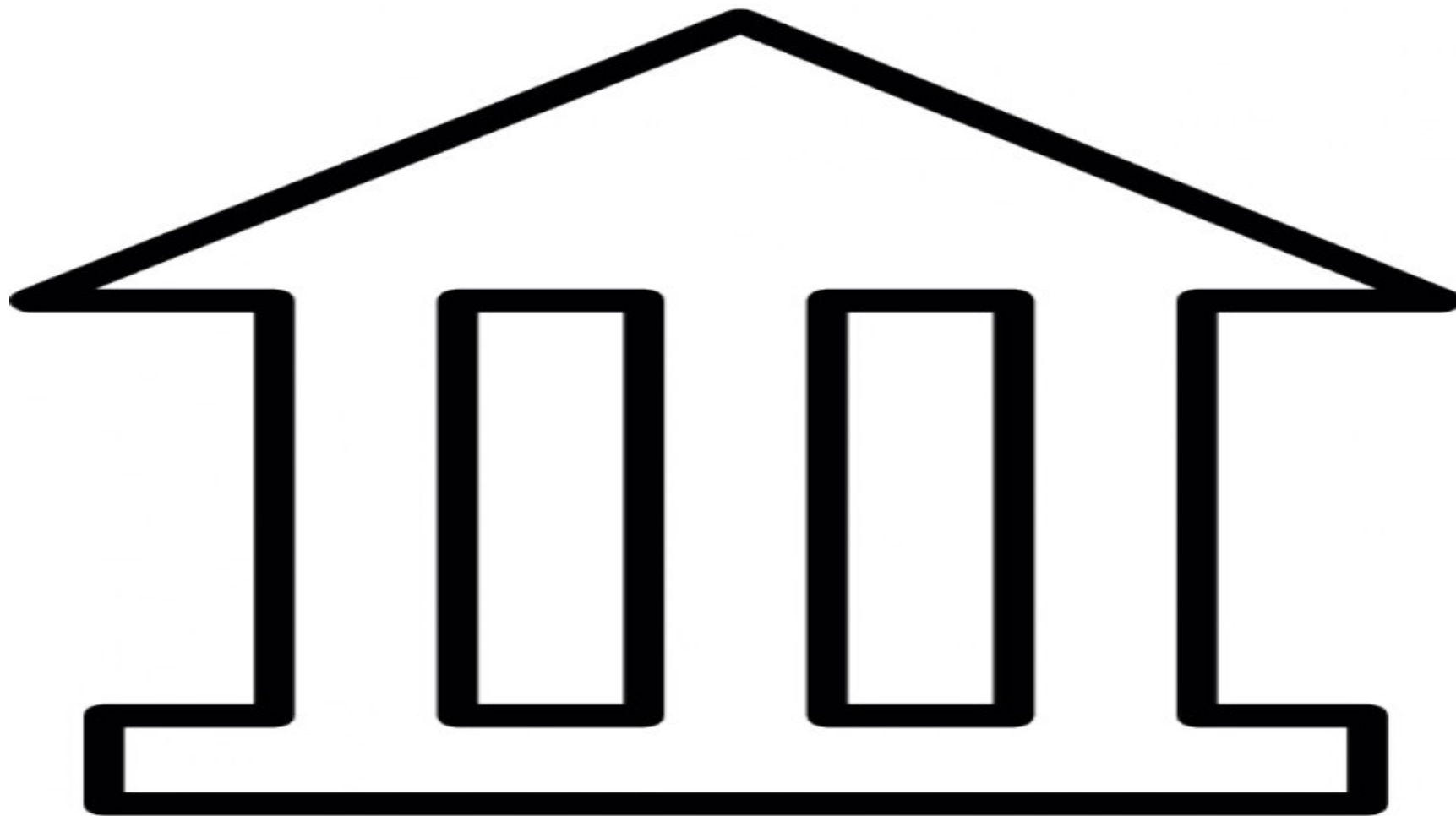
Vlek (2000)

# Behaviour Change Strategies



**Dikgang & Visser (2012)**

- 1. Things we do frequently**
- 2. A practice or custom**
- 3. A routine**
- 4. A dominant disposition**
- 5. Addiction.**



**Repetition    Automaticity    Context-Cued**



**Repetition Automaticity Context-Cued**

***“I do intend to, a lot of the time, bring a couple of these bags for life that we have, but it’s just so ingrained to grab these plastic bags when you get there.”***

***(Male, England, Before)***

- 1. Disrupt frequency**
- 2. Disrupt automaticity**
- 3. Disrupt context(ual cues)**



1. Disrupt frequency
- 2. Disrupt automaticity**
3. Disrupt context(ual cues)



***“It makes people think about recycling and reusing bags, it’s not so much about the cost of the bags, because it’s minimal, but it’s enough to get people thinking.”***

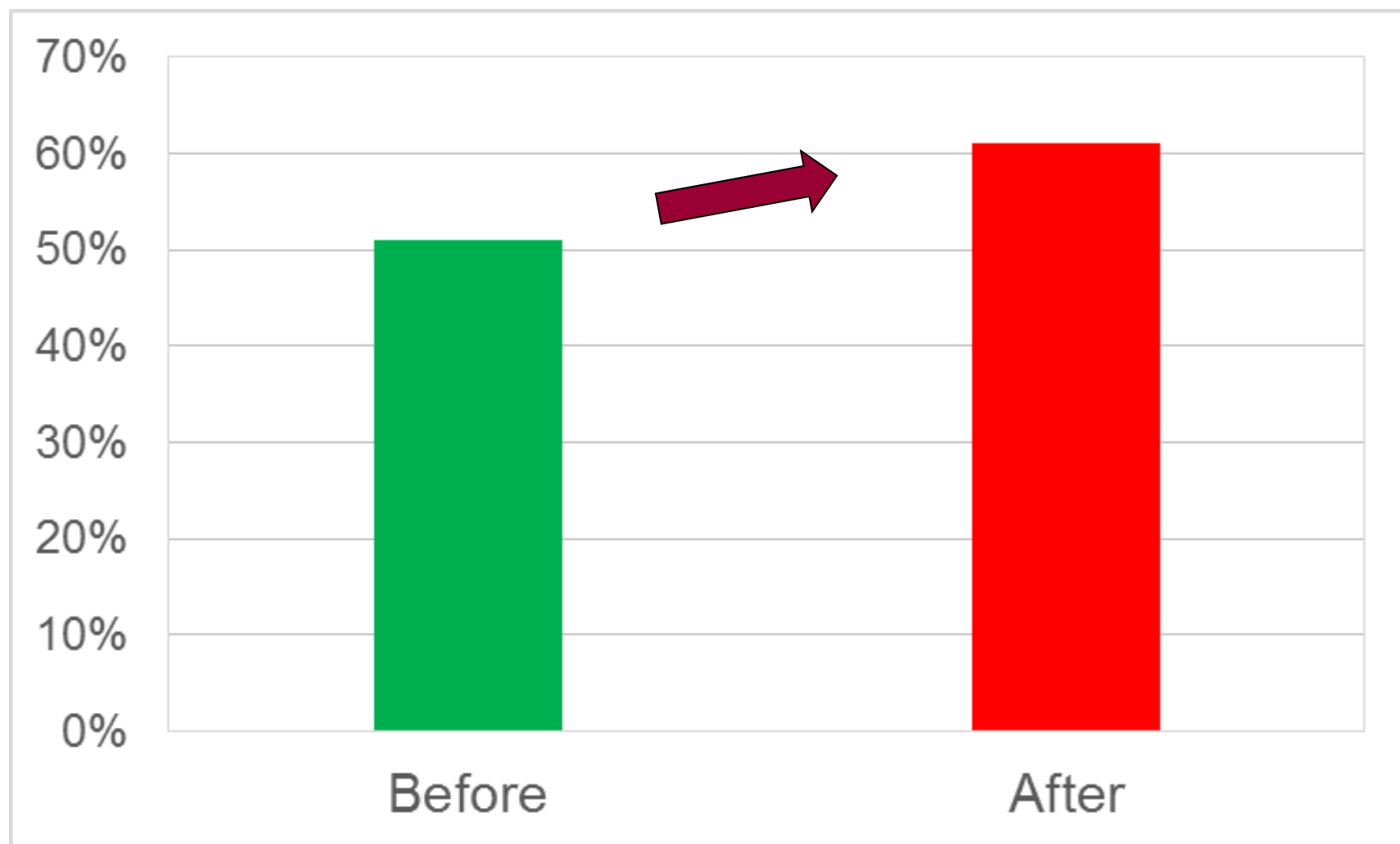
***(Female, England, After)***

***“I think it makes me aware of the fact that I'm paying for something that I'm only going to use for a few minutes.”***

*(Male, England, After)*

# Acceptability of the Charge

## England



***“It’s very easy to carry your own shopping bag.”***

*(Female, England, After)*

***I either have the [bags for life] in the boot of the car, or if I buy something on a whim, I have one of those little fold up ones that goes in my handbag.”***

*(Female, England, After)*



**Brown et al. (2009)**  
**Schuitema et al. (2010)**  
**Poortinga et al. (2013)**  
**Transport for London (2014)**

- **Explanation for increased support**
  1. experience of benefits
  2. changing (underlying) attitudes
    - ✓ environment
    - ✓ policy interventions
    - ✓ financial instruments/taxation
    - ✓ pricing
  3. preference for status quo (*Samuelson & Zeckhauser 1988*)
- Hess and Börjesson (2019) show that attitudes have similar impact before and after introduction of congestion charges, but ‘threshold effects’ – suggesting status quo bias





***“I’m glad there’s a charge on plastic bags because we need to do something. I would hope that it is going to make a difference to landfill and to the way people think about the things that they dispose of.”***

*(Female, England, After)*

***“I’m very aware of the amount of plastic bottles [now].”***

*(Male, England, After)*



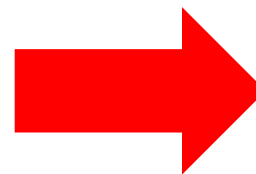
**Support up**



**Support up**



**No change**



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## Plastic bag charge: Could fee be applied to other packaging?

By Dominic Howell  
BBC News

29 September 2016 | UK

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THINKSTOCK

A 5p charge for plastic bags in large stores was introduced in England a year



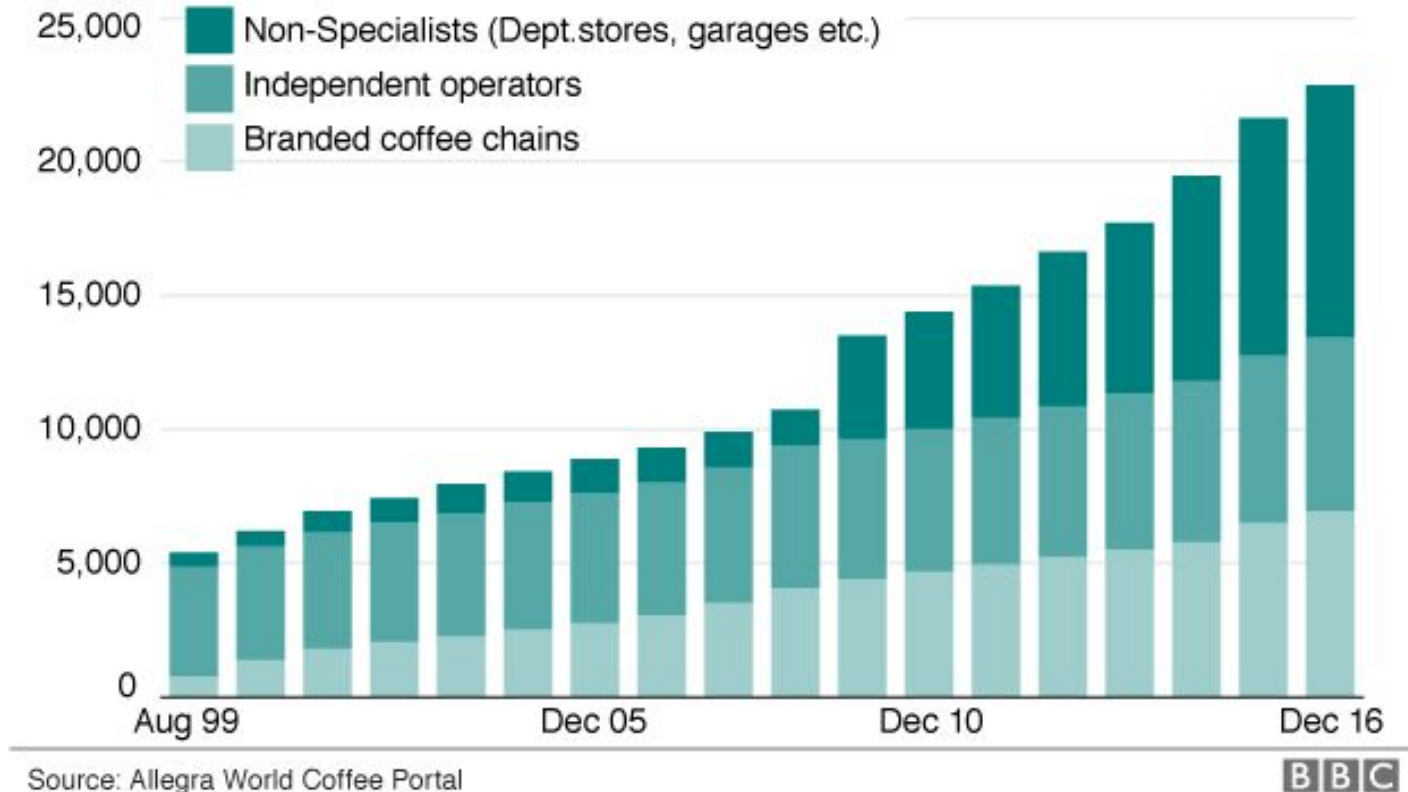
# Disposable Coffee Cups

- Billions of disposable coffee cups (DCCs) being used per year
- Estimates range from 2.5 to 10 billion cups
  - less than 1% is recycled
- DCCs difficult to recycle due to PE (plastic) lining
  - technically possible, but only at three specialised sites in the UK
- ‘On-The-Go’ consumption
  - diffuse disposal of DCCs
- Most DCCs end up in landfill/litter

**3 BILLION TAKEAWAY CUPS GO TO LANDFILL EVERY YEAR IN THE UK**



## UK coffee shops



- **Number of coffee shops is projected to reach 31,000 by 2022 (Allegra, 2018)**

- Bewley's contacted Cardiff University to set up the study
- To see if easily implementable measures can increase reusable cup usage (*measures that can be taken by any coffee shop*)
  - **Posters/showcards** on environmental impact of coffee cups
  - **Selling reusable cups** at (about) cost price
  - **Distributing reusable cups for free** to customers
  - **Reward** for using a reusable cup (i.e. 15-25p *discount*)
  - **Penalty** for using disposable cup (i.e. 25p *charge*) – after a price reduction!

- **Bewley's recruited 12 sites collaboration with 4 universities and contract caterer Bartlett Mitchell**  
*(sites had different combinations of measures)*
- **Before-and-after intervention study**
- **Recording daily sales of hot drinks for 10 weeks**  
*(5 weeks before and 5 weeks after, typically 2 x 25 days)*

**FIGHT THE WASTE!**  
3 BILLION TAKEAWAY CUPS GO TO  
LANDFILL EVERY YEAR IN THE UK



**JUST USE ONE**  
**#KEEPYOURCUP**  
because the majority  
cannot be recycled

KEYS. WALLET. PHONE.  
**KEEP CUP.**



REMEMBER YOUR CUP WHEN YOU'RE WALKING OUT  
THE DOOR & KEEP PAPER CUPS OUT OF UK LANDFILLS

3 BILLION TAKEAWAY CUPS GO TO  
LANDFILL EVERY YEAR IN THE UK



because the  
majority cannot  
be recycled

**FIGHT THE WASTE!**  
3 BILLION TAKEAWAY CUPS GO TO  
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**JUST USE ONE**  
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***Financial incentives in combination with other measures can substantially increase the use of reusable cups both in the short term and in the long term.***

***But... while a charge is effective,  
a discount is not***



# NEWS

## Coffee cup fee could cut use by 300 million, study suggests

30 March 2017

f t m e Share



GETTY IMAGES

Charging coffee drinkers for their disposable cups could cut their use by up

to 300 million, a study suggests. Campaign groups, photographers, Andrew Hutchinson/Getty Images

The billions of disposable coffee cups thrown away each year globally should be replaced with reusable ones because they are a waste of resources and harm forests, an international coalition of NGOs has urged.

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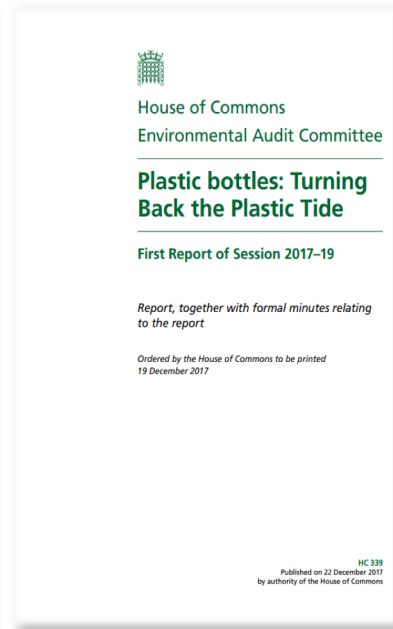
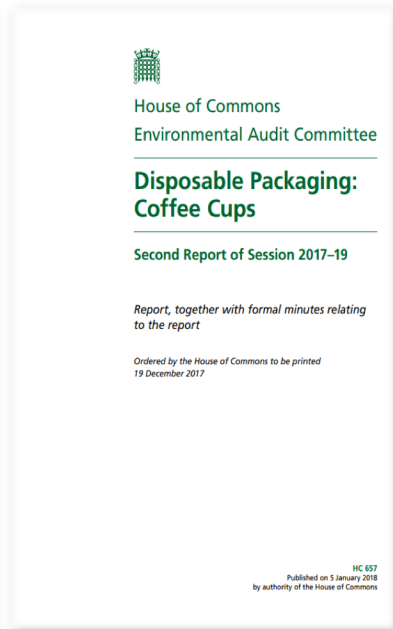
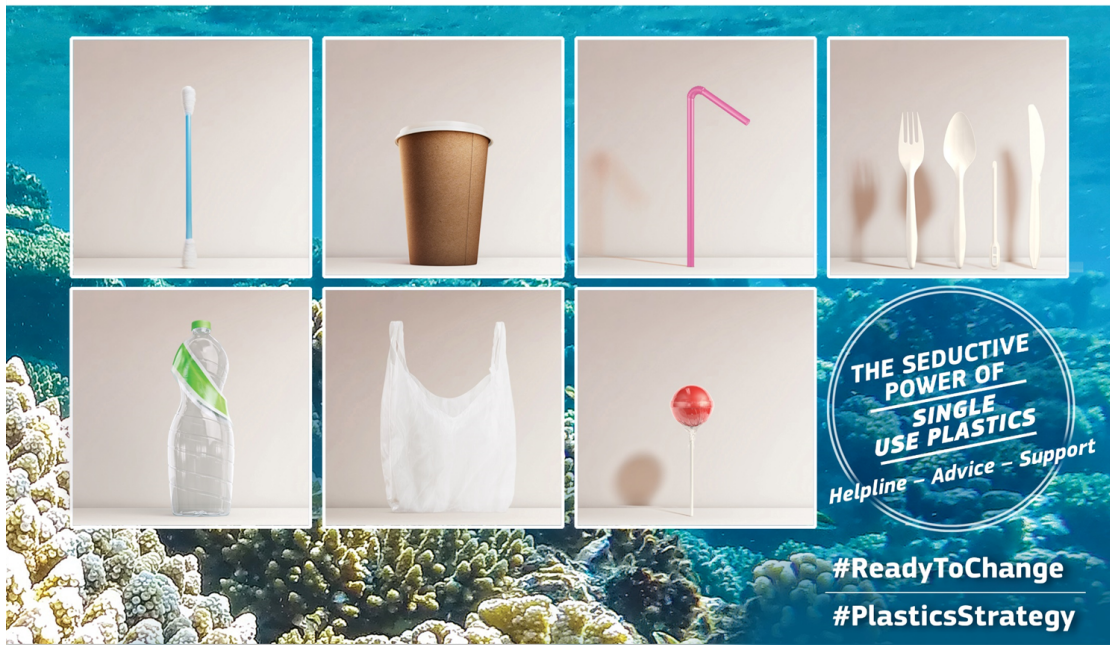
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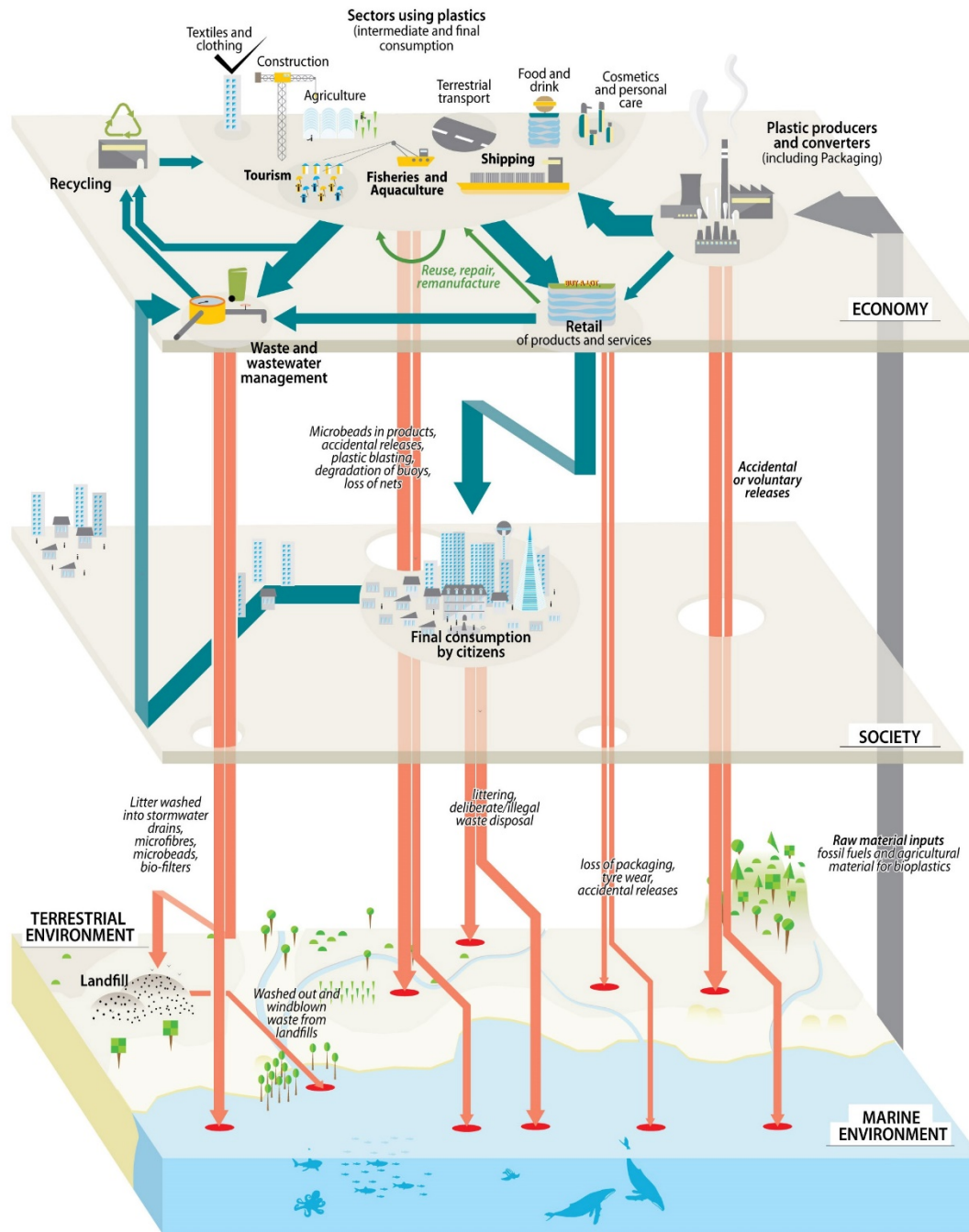


***Does that mean we need to start charging for all plastics and throw-away items?***



# BLUE PLANET II







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