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# Single Use Plastics versus Consumerism in the case of Snack Food Packaging; *Evolving Societal Norms, Culture and Tipping Points*

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International Sustainable Production and Consumption  
4-5 October 2018, Manchester, United Kingdom

**Edmond Byrne** BE MSc PhD MA(TLHE) CEng FIChemE MIEI  
Professor of Process & Chemical Engineering,  
University College Cork, Ireland

## Plastics Tipping Point

**E&T**  
ENGINEERING  
AND TECHNOLOGY



By Christine Evans-Pughe  
Published Tuesday, May 22, 2018

**Franchise** the franchise advice centre  
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### TIPPING POINT ON PLASTIC - HOW ARE FRANCHISES COPING?

last updated 10/06/2018

## Plastic pollution – what was the tipping point?

20/06/2018

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3



**DR PHIL ALDOUS**  
Director of Water, Thomson Ecology

Despite years of research, news stories concerning plastics and the pollution of the marine and water environment have finally started making headlines. Dr Phil Aldous writes. Why the sudden change?

Returning to the trigger that made us all sit up and listen. Was it the BBC's 'Blue Planet II' – and Sir David Attenborough's words, "the future of all life now depends on us" – that was the trigger for action, and why is that more powerful than 50 years of published research? Maybe because it is citizen power that can be really emotive and, if spoken by a non-politician, is seen as more trustworthy. We do need to reduce our plastic pollution in seas and waterways and clean up our act. All of industry has a role to play in this – whether that is manufacturer or user.

## Tipping point

12 Jun 2018 | Updated: 15 Jun 2018 | Robin Mannering

Print | Email | Share | Comment |

Shocking images of the damage our plastic use has had on the planet have put the issue firmly on the public and government's radar. C-Store looks at what retailers are doing to reduce its use and why the war on plastic is far from straightforward

Plastic has suffered a dramatic fall from grace. Its destructive impact on the environment was hardly a secret, but it wasn't until David Attenborough's recent Blue Planet series that public consciousness appeared to undergo a tipping point.



Blue Planet II (BBC, 2017) David Attenborough

## Media Driven..

## BREAK THE PLASTIC HABIT! JOIN THE DAILY MAIL'S CAMPAIGN

Ten years ago, the Mail launched a trailblazing campaign to rid Britain of the scourge of plastic supermarket bags — prompted by a heartrending, shaming picture of an endangered turtle entangled in one, which was used on the front page.

The success of our Banish The Bags initiative has been nothing short of phenomenal.

Join the Daily Mail's battle for a world with less plastic waste

**ing it**

**A million bottles a minute: world's plastic binge 'as dangerous as climate change'**

Exclusive: Annual consumption of plastic bottles is set to top half a trillion by 2021, far outstripping recycling efforts and jeopardising oceans, coastlines and other environments

- Help us tell the stories that need to be told. Become a Guardian supporter or make a contribution today

Dea Laville and Matthew Horne

28 Jun 2017 13:50 BST

138,645 875

0:00:00 / 1:00:36

▶ We need to talk about plastic bottles

A million plastic bottles are bought around the world every minute and the number will jump another 20% by 2021, creating an environmental crisis

**Mail**

For Mail, PM pledges... ALL plastic carrier bags... carriers and stores... to clean up the oceans

**MAY: I'LL END THE PLASTIC SOURCE**

**Daily Mail**

**PLASTIC: THE TIDE TURNS**

Holding Mail front page, UN boss unveils

**Daily Mail**

**SUPERMARKET BANS PLASTIC**



# sky ocean rescue

#PassOnPlastic



Oval: One Year On

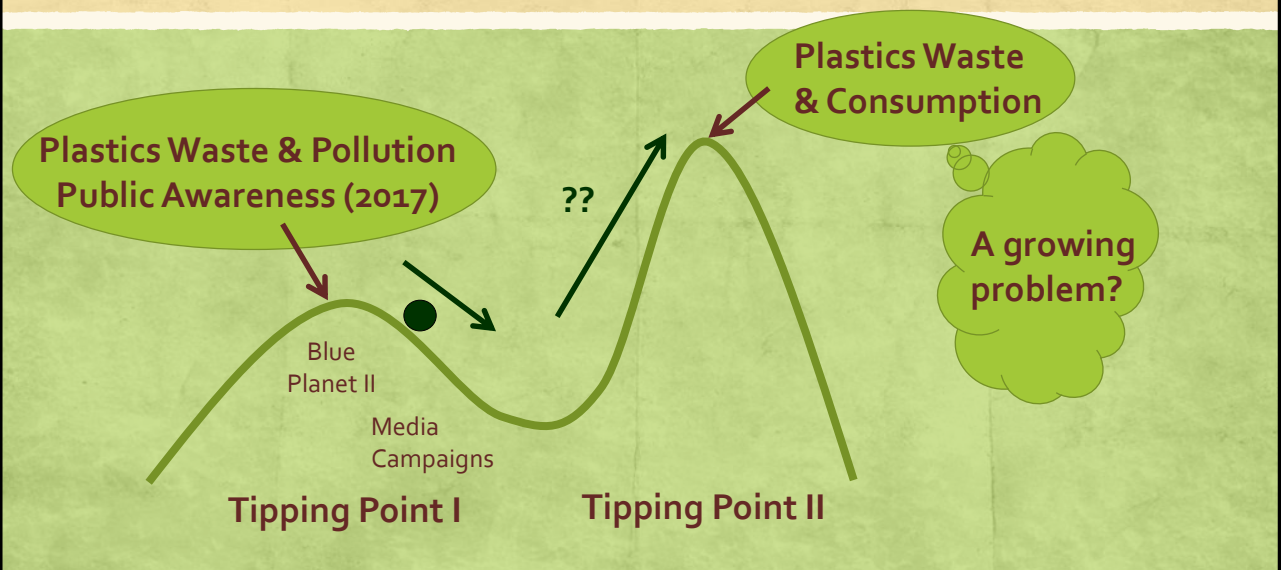


Emily Penn joins Sky Ocean Rescue as official ambassador



Sky Ocean Rescue launches in Ireland

## The Plastics problem: Overcoming Consecutive Tipping Points



# *Plastics Consumption & Waste: A Growing Problem?*

## Plastics Consumption & Waste: A Growing Problem?



"A **whale** found washed up on a beach in Spain earlier this year had **29kg of large pieces of plastic** in its digestive system – including rubbish bags, ropes, pieces of net and a drum.

In 2015, an international research team led by Erik van Sebille at Imperial College London estimated that between **15 and 51 trillion plastic particles** are floating in the world's oceans. Their combined weight is between **93,000 and 236,000 tonnes**.

Each year, between **1.2 and 2.4 million tonnes** of plastic enters the oceans from **rivers**, according to a paper published last year in Nature Communications by Laurent Lebreton of The Ocean Cleanup (TOC) and colleagues. They calculated that two-thirds of this comes from just **20 rivers, mostly in Asia**."

The Institution of Engineering & Technology (2018)

<https://eandt.theiet.org/content/articles/2018/05/plastic-waste-pollution-in-the-ocean-technology-at-the-tipping-point/>



# Plastics Consumption & Waste: A Growing Problem?

*"Based on forward projections, current (2018) waste arisings are estimated at 5.2 million tonnes, and are forecast to increase to around 6.3 million tonnes by 2030 – a 20% increase over this 12 year period."*

A plastic future: Plastics consumption and waste management in the UK (WWF, 2018)

Global plastic production and future trends (Ryan, 2015)



# Plastics Consumption & Waste: A Growing Problem?

SCIENCE ADVANCES | RESEARCH ARTICLE

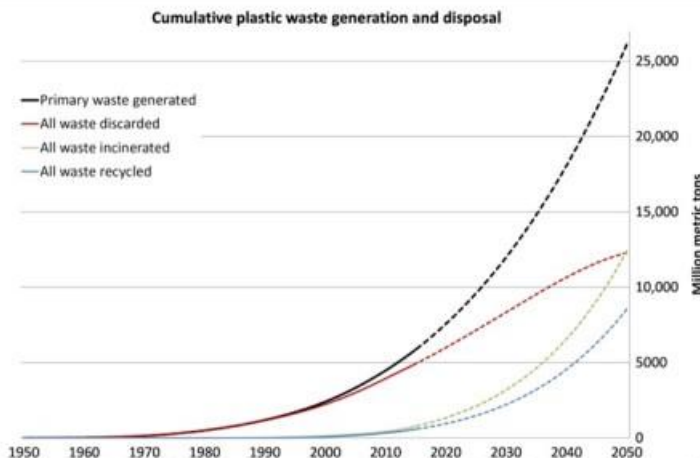


Fig. 3. Cumulative plastic waste generation and disposal (in million metric tons). Solid lines show historical data from 1950 to 2015; dashed lines show projections of historical trends to 2050.

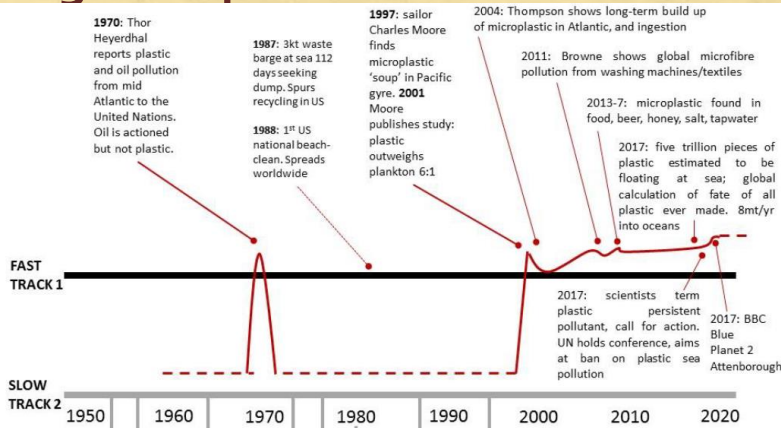
Geyer *et al.*, (2017) Production, use, and fate of all plastics ever made. *Science Advances*, 19 Jul 2017: Vol. 3, no. 7



*Plastics Consumption & Waste:  
A long recognised problem..*



# Plastics Consumption & Waste: A long recognised problem..



Chris Rose (2017)

<http://threeworlds.campaignstrategy.org/wp-content/uploads/2017/12/Why-We-Suddenly-Have-A-Plastics-Crisis.pdf>

# Plastics Consumption & Waste: A long recognised problem..



The unaltered stomach contents of a dead albatross chick photographed on Midway Atoll National Wildlife Refuge in the Pacific in **September 2009** include plastic marine debris fed the chick by its parents. (Source: Greenpeace)



## Plastics Consumption & Waste: A long recognised problem..

EDUCATION FOR CHEMICAL ENGINEERS 4 (2009) 51-67



Contents lists available at ScienceDirect

Education for Chemical Engineers

journal homepage: [www.elsevier.com/locate/ece](http://www.elsevier.com/locate/ece)

IChemE

### Chemical engineering in an unsustainable world: Obligations and opportunities

Edmond P. Byrne\*, John J. Fitzpatrick

Department of Process & Chemical Engineering, University College Cork, Ireland

*"Plastics companies who hire chemical engineers who see their role as merely **"paid hands"** to produce plastics more efficiently may find themselves without a market over time, and the chemical engineer they hired without a job. Chemical engineers who join plastic manufacturers, and who see their role as one which produces a product which meets a required specification for a given function, may help lead their organisation to continued success through **innovation and new product lines.**"*

Byrne & Fitzpatrick (2009)

## Educating the chemical engineer of the future

EDUCATION tce

Sustainability needs to quickly become the context for 21st century chemical engineering education, argues Edmond Byrne

The 21st century promises to present humankind with an unprecedented confluence of global challenges, all emanating from an unsustainable societal context. These

will flourish on Earth forever. Based on trends expressed through any of the metrics that abound regarding ecological, environmental, social and even economic measures, one would be hard pressed to argue that the

The Chemical Engineer (tce)  
(Issue 833, 27-29) Nov 2010

the design team, such as: "Are there materials, and corresponding processes, other than MVC/PVC that can take their place, that are sustainable, or at least, less unsustainable?" Could for example, lactic acid, and the resultant biodegradable plastic polymeric lactic acid (PLA) take the place of PVC for many applications? Or "In general, how feasible is it to produce plastics from renewable materials as opposed to oil?" "What are the technical and economic barriers preventing for example, the production of biodegradable polymeric materials to meet the required specifications?"

tce

the chemical engineer | issue 833 | november 2010



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WATER TREATMENT | SAFETY | EDUCATION | AWARDS REPLYMENT

## Consumer Responses..

# Consumer Responses



Macroforces

Trends

Toolkit

About us

Responsible  
LIVING

"I want to have a positive impact on my society and the environment, and take pride in that sustainable way of living"

<http://www.bordbiacconsumerlifestyletrends.ie/trends/responsible-living/>

# Consumer Responses



55%

increase in searches for 'plastic recycling' this year following Blue Planet's episode on marine plastic

Hitwise online search behaviours, 2018

Germany (KPMG, 2016):  
'84 % even prefer unpacked food, where possible'

(UK, Kantar TNS, 2018):  
Factors important in shoppers purchasing decisions

- 'Price' 72%
- 'Quality' 58%
- 'Special offers' 42%
- 'Packaging concerns' 17%
- 'Fairtrade' 8%
- 'Carbon footprint' 6%

<https://uk.kantar.com/consumer/green/2018/plastic-packaging-concerns-across-generations/>

## Plastic packaging: concerns across generations



EVE DIXON  
UK Managing Director, FMCG & Retail

GREEN 22.05.2018 / 13:00



Kantar TNS data shows that packaging is an important concern for

"63% are concerned about reducing the amount of packaging they buy."

UK, Kantar TNS (2018)

63% packaging they require, particularly when it comes to plastic bottles and plastic bags, as well as single-use cups and straws.



# Consumer Responses

ITV REPORT 26 September 2018 at 11:00am

## Royal Mail ask people to stop posting their non-recyclable crisp packets back to Walkers without envelopes



38 DEGREES  
people. power. change.

Search

Start a Campaign | News | Donate | More

To: Walkers Crisps

### Walkers Crisps: ditch plastic packaging

GA Campaign created by Geraint Ashcroft



331,437 of 400,000 signatures

Sign the petition

First Name \*

Last Name \*

Email \*

Postcode \*

I'd like to be emailed about this, and other 38 Degrees campaigns

Yes, keep me informed via email

No, don't send me emails or keep me

# *The Engineers Response*

## The Engineers Response

- There's huge **Media and Consumer hype**.
- ..and **ignorance**: e.g. carbon emissions from ground down recycled glass greater than that of single use plastics.
- Yet, we need to **do something**/seek acceptable consumer solutions.
- It used to be the **product** that was centre of attention, now it's the **packaging!**



*Industry Responses..*



# Industry Responses



It takes around 80 years for crisp packets to decompose. Credit: 38 Degrees



38 Degrees  
@38\_degrees

Follow

From @walkers\_crisps "We have received some returned packets and recognise the efforts being made to bring the issue of packaging waste to our attention. "The returned packets will be used in our research..." #packetinwalkers



Walkers reveals what they will do with returned crisps packets  
People are sending the packets back to the company in the post  
leicestermercury.co.uk

8:15 am - 25 Sep 2018

BY 2025  
**100%**  
of plastic packaging to be reusable, recyclable or compostable

BY 2025  
**70%**  
of plastic packaging effectively recycled or composted

THE UK  
PLASTICS  
PACT



BY 2025  
**ELIMINATE  
SINGLE-USE  
PACKAGING**

Take actions to eliminate problematic or unnecessary single-use packaging items through redesign, innovation or alternative (reuse) delivery models.

BY 2025  
**30%**  
average recycled content across all plastic packaging

<http://pepsico.co.uk/what-we-believe/Planet>

## Industry Responses

### Nestlé: 'It has taken us a little more time than we would have liked to address the issue of plastic packaging'

By Jenny Eagle  
17-Apr-2018 - Last updated on 17-Apr-2018 at 12:28 GMT

#### Nestlé Philippines responds to Greenpeace waste criticisms following Manila's 'plastic waves'

By Pearly Neo  
04-Sep-2018 - Last updated on 04-Sep-2018 at 07:22 GMT



Nestlé Philippines has responded to criticisms of plastic packaging waste by environmental campaigners following 'plastic waves' that hit Manila this month.

RELATED TAGS: Plastic Waste, Philippines, Nestlé

Nestlé Philippines has responded to criticisms over packaging waste made by environmental campaigners after 'plastic waves' hit Manila, with the firm issuing reassurances that steps are in place to 'reduce its environmental footprint'.

Tropical Storm Yagi (local name: Karding) hit Manila earlier this month, and its aftermath saw enormous waves of

### NESTLÉ PACKAGING COMMITMENTS



## Industry Responses

*The partners "aim to develop and launch at commercial scale a PET plastic bottle made from bio-based material i.e. 100% sustainable and renewable resources ..[e.g.] used cardboard and sawdust, so it does not divert resources or land from food production"*

Nestlé Good Food, Good Life

Change Location

Home > Media > Latest News > Danone and Nestlé Waters Launch NaturALL Bottle Alliance with California Startup to Develop 100% Bio-Based Bottles

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Press Information and Resources

Danone and Nestlé Waters Launch NaturALL Bottle Alliance with California Startup to Develop 100% Bio-Based Bottles

R&D Partnership to Accelerate Food and Beverage Industry Breakthrough - First New Bottles to Reach Store Shelves in 2020

### PepsiCo Joins Danone And Nestlé's NaturALL Bottle Alliance

Published on Sep 10 2018 1:30 PM in Packaging And Design tagged: Trending Posts / PepsiCo / Danone / Nestle waters / NaturALL / Origin Materials

<https://www.nestleusa.com/media/pressreleases/nestle-waters-launch-alliance-naturall-bio-based-bottles>



## Industry Responses

### NEW MATERIALS

## Plastic: changing it up

If we are going to benefit from new materials, clear labelling will be essential. Bio-PET, for instance, is a plastic made from renewable feedstocks like the leftover pulp from harvesting sugarcane. Coca Cola's bio-PET Plant bottle is made like this, but bio-PET behaves like oil-based PET (used for plastic bottles) and is recyclable, but not compostable.

There may yet be hope for biodegradable PET following the discovery of an enzyme dubbed 'PETase', produced by a bacterium called *Ideonella sakaiensis* 201-F6 that was found in the soil of a Japanese PET bottle recycling plant. Researchers at the US Department of Energy's National Renewable Energy Laboratory (NREL) and University of Portsmouth announced recently they had developed a faster working variant of the enzyme this year that can break down PET bottles more quickly.

The Institution of Engineering & Technology (2018)

<https://eandt.theiet.org/content/articles/2018/05/plastic-waste-pollution-in-the-ocean-technology-at-the-tipping-point/>

## Industry Responses

*"The chances are it's being 'over packed' in an unnecessarily high level of protection.*

*Shortening its shelf life, and adjusting its associated packaging requirements, can be a simple but highly effective way of improving its environmental performance."*

<https://www.nestle.com/randd/news/allfeatures/swiss-chocolate-bars-save-environment-packaging>

 **Nestlé** Good Food, Good Life

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Our vision

Research news

All features

Our global network

Environmental sustainability

Nutrition

Technologies

Quality & safety

Solar Impulse

Home > R&D > Research news > The 700 chocolate bars that could help save tonnes of packaging



## The 700 chocolate bars that could help save tonnes of packaging

In a sealed room deep inside a Swiss laboratory, 700 bars of chocolate sit neatly side-by-side, wrapped in transparent packaging, attached to sensors, exposed to light for 24 hours a day.



## Industry Responses

"A Tetra Pak package has a thin layer of polymer, or plastic, to prevent moisture getting in or out and to keep contents fresh. ..Our **long-term ambition** is for all our chilled and ambient packages to be made from **renewable alternatives to oil-based plastics**.

..Despite considerable progress, **bio-based polymers** are still **only in a small fraction of our cartons** and a **niche product** for the plastics industry.

..We are working with a number of our stakeholder partners to explore these issues, while also continuing to assess alternatives like other **plant-based materials, organic waste and algae.**"



<https://assets.tetrapak.com/static/documents/sustainability/2017-sustainability-report.pdf>

## Industry Responses

"Performing as regular plastic is not so simple. ..TIPA's solution is a blend of **bio-based polymers** and derived from **plant-based sources**, which is not an easy technological feat."



<https://www.geektime.com/2015/06/21/how-tipas-100-biodegradable-packaging-plans-to-solve-the-food-waste-problem>



# Industry Responses

# Packaging Food With Food to Reduce Waste



<https://www.nytimes.com/2017/05/30/dining/packaging-materials-food-waste.html>



The design company Ecovative makes a variety of packaging materials using mycelium fungus. Nathaniel Brooks for The New York Times

*"Molded packing material by Ecovative made from a mushroom-type fungus."*

# Industry Responses

Packaging the Future: Edible Wrappers, Containers and Bags (Yum?)



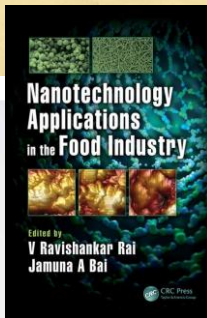
**PACKAGING THE FUTURE**  
edible wrappers, containers and bags

You Will Soon be Able to Eat Your Food Packaging

August 23, 2016 0 Comments 897 Views 3 Min Read

<https://inhabitat.com/packaging-the-future-edible-wrappers-containers-and-bags-yum/>

<http://sciencenewsjournal.com/will-soon-be-able-to-eat-food-packaging/>



# Ooho!

Skipping Rocks Lab

Water you can eat



<http://www.skippingrockslab.com/ooho!.html>

## Industry Responses

No packaging options but.. students need to purchase microchipped bottles in order to dispense.

### Students To Trial Smart Coca-Cola Dispensers To Reduce Drinks Packaging

Posted on 9 October 2017 by Darrel Moore

Coca-Cola European Partners (CEP) has launched a new initiative in partnership with the University of Reading that will see students trial Coca-Cola Freestyle machines.

The programme combines a new generation of smart Coca-Cola fountain dispensers – known as Coca-Cola Freestyle machines – with refillable containers that are microchipped to interact with the dispenser technology, allowing students and staff to buy all their soft drinks in reusable bottles.



## Industry Responses

### Recycling

### Pret a Manger doubles discount for bringing reusable coffee cups

Chain will now knock 50p off prices in bid to help change customers' habits, with the UK discarding an estimated 2.5bn coffee cups every year

Sara Luxmoore and agency

Tue 2 Jan 2018 18.46 GMT



3,484

This article is over 8 months old





Monday 24 September 2018

# Industry Responses



University College Cork is Now Home to Ireland's First Plastic Free Café



## Ireland's first plastic free café opens today



<https://www.independent.ie/life/food-drink/irelands-first-plastic-free-cafe-opens-today-37305145.html>



# Industry Responses

HISBE STORES MANIFESTO PRODUCTS VALUES ACTIVISM ABOUT US GALLERY



- FOOD GOOD
- LOCAL YES
- SEASONAL NATURALLY
- ANIMALS HEALTHY
- PLANET HAPPY
- WASTE NO
- PEOPLE VALUED
- ETHICAL ABSOLUTELY

**YOUR CITY NEEDS YOU!**  
 HELPING BRIGHTON GO #PLASTICFREE  
 JOIN THE FIGHT AGAINST SINGLE-USE PLASTIC

**LET'S IGNITE A REVOLUTION**

Buck convention, break the mould, reinvent, challenge, transform, make good **FOOD** normal, affordable, accessible, source **LOCAL**, **SEASONAL**, **ETHICAL**, sustainable, don't **WASTE** it, eat it, support independents, real producers, pay fairly, price fairly, be transparent, less hype, more truth, value our **PEOPLE** and respect customers, farmers, suppliers, **ANIMALS** and the **PLANET**, champion quality, health, provenance and service, create a real food community and put happiness before profits. Together we will transform the food industry. So eat your greens, smile at strangers and know this to be true: being a fully conscious shopper will make you popular, desirable and *very attractive*.

**HOW IT SHOULD BE**

at our kitchen table next to the soap box.

# *The Pepsi Challenge!*

## The Pepsi Challenge



By 2011, SunChips unveiled a new and improved, and less noisy, biodegradable bag

<https://money.cnn.com/video/news/2018/07/13/starbucks-sunchips-go-green-orig.cnnmoney/index.html>



# The Pepsi Challenge

MIT Sloan Management Review

## Pepsi's biodegradable backlash: The snack bag that was too noisy

Leslie Brokaw  
Tuesday, March 18, 2014 - 4:15am



<https://www.greenbiz.com/blog/2014/03/18/pepis-biodegradable-backlash-snack-bag-was-too-noisy>

f SORRY , BUT I CAN'T H



SORRY , BUT I  
CAN'T HEAR YOU  
OVER THE  
SUNCHIPS BAG !

<https://money.cnn.com/video/news/2018/07/13/starbucks-sunchips-go-green-orig.cnnmoney/index.html>

# The Pepsi Challenge



But Consumer Reports said those bags didn't decompose as fast as the company claimed

<https://money.cnn.com/video/news/2018/07/13/starbucks-sunchips-go-green-orig.cnnmoney/index.html>

## PepsiCo to launch 100% compostable, plant-based packaging

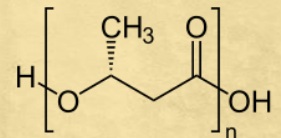
June 6, 2018 Food Business Africa



**INDIA** – The food and beverage company PepsiCo has announced it will be launching 100% compostable, plant-based packaging for its Lay's and Kurkure snacks products in the fourth quarter this year to address rising concerns around plastic pollution.

<https://www.foodbusinessafrica.com/2018/06/06/pepsi-co-to-launch-100-compostable-plant-based-packaging/>

## The Pepsi Challenge



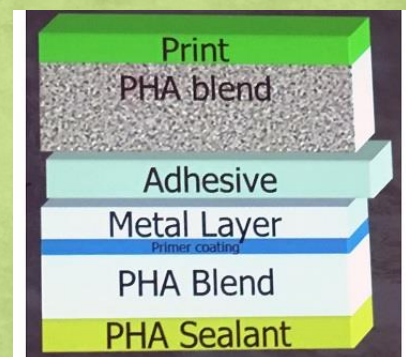
## Compostable snacks packaging snags bioplastic award for Danimer Scientific, PepsiCo

by: Rick Lingle in Packaging, Sustainability, Materials on September 18, 2018

<https://www.plasticstoday.com/packaging/compostable-snacks-packaging-snags-bioplastic-award-danimer-scientific-pepsi-co/83659095059493>

The industrial compostable snack bag is comparable in feel, noise and performance to PepsiCo's current bags and certified to be industrially compostable by TUV Austria. The new Danimer resins that are blends of biopolymers and mineral filler give the bag its white exterior and can be processed in blown film lines for improved economics. The new bio-based structures are currently being piloted in a limited test in the U.S. and Chile, with plans for a test in India later this year.

Polyhydroxyalkanoates (PHAs): polyesters produced by microorganisms, including via bacterial fermentation of sugars/lipids. They are used to produce biodegradable plastics.

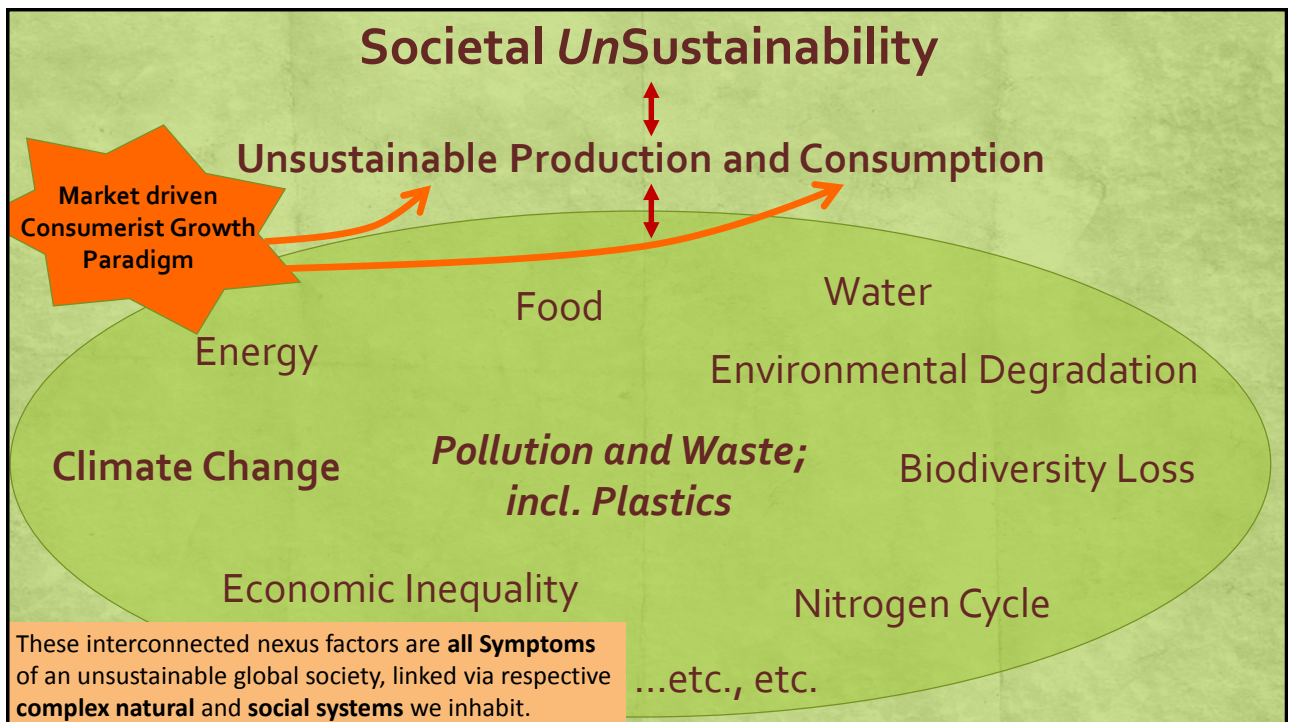




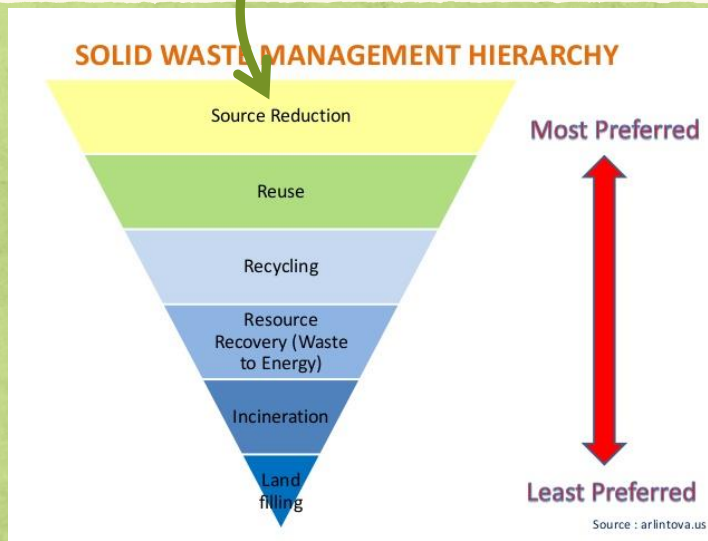
## Problematizing Responses..

*Are proposed 'solutions' (including recyclable, bioplastic, biodegradable or no packaging options) more sustainable?*

*..Or in the context of the dominant societal paradigm of consumerist growth will they ultimately just contribute to creating more waste, carbon emissions & environmental degradation?*



## Waste Triangle: Reduce! (Consumption)



## The problem with Recycling..

*'in the long run, recycling reduces waste generation only if it reduces primary material production; otherwise, it merely delays it'.*

Geyer et al. (2015) Common Misconceptions about Recycling, *Journal of Industrial Ecology*, 20, (5) pp. 1010-1017.

*"No amount of recycling can get us out of this global mess," said Abigail Aguilar, Campaigner at Greenpeace Philippines.*

*"Corporations may have conned us by providing so-called convenience but it's not convenient when Your city, oceans, roads, and rivers are clogged by plastic garbage."*

<https://www.onegreenplanet.org/news/manilla-streets-literally-flooded-trash/>





The problem with Biodegradable Plastics..

## European Parliament says biodegradable plastics will not solve plastic pollution

13 09 2018

animals. The Parliament today has acknowledged that biodegradable plastics are not a silver bullet to our plastic pollution crisis, but merely a distraction from real solutions. Policies that dramatically cut our plastic footprint need to be urgently implemented."

The Parliament voted to strengthen the European Commission's plans to slash plastic pollution, under the European Strategy for Plastics in a Circular Economy launched in January 2018.

**FOR IMMEDIATE RELEASE: Strasbourg, 13/9/2018**

<https://rethinkplasticalliance.eu/news/european-parliament-says-biodegradable-plastics-will-not-solve-plastic-pollution/>

*Promoting  
Responsible Consumption?*

**RETHINK PLASTIC**

OUR RELATIONSHIP WITH PLASTIC

CUT DOWN ON VIRGIN PLASTIC

OUR PLASTIC FOOTPRINT

**REDUCE PLASTIC PRODUCTION & CONSUMPTION**

REDESIGN PLASTIC PRODUCTS

IMPROVE MANAGEMENT OF PLASTIC WASTE

CLEAN NGOs, representing thousands of young people across every EU Member State. A grassroots plastic movement, consisting of...

TOXIC FREE

INCORPORATE RECYCLED PLASTICS

DISPOSABILITY IS A DESIGN FLAW

FULLY RECYCLABLE

PRODUCER ACCOUNTABILITY

BETTER TRACEABILITY

OWNERSHIP SERVICE

INCENTIVES

TECHNOLOGIES

RE-PURPOSE

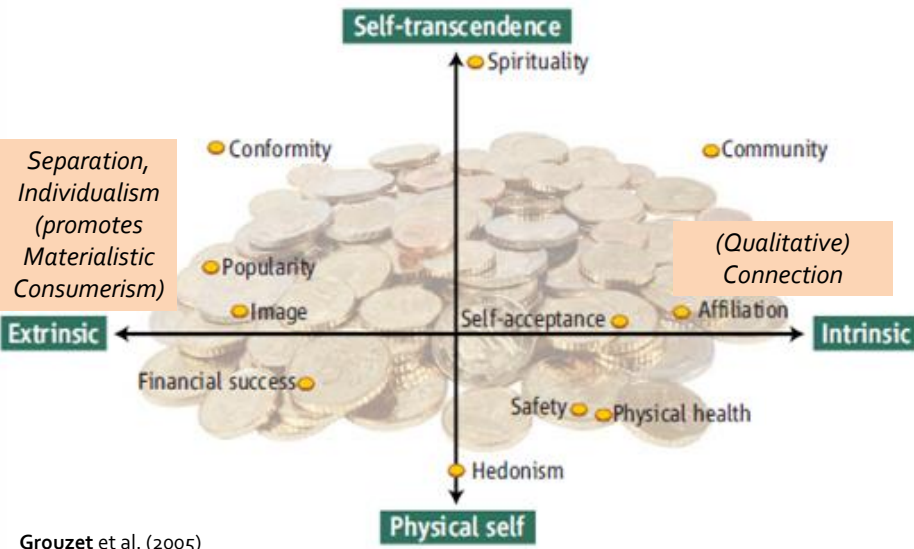
RE-USE

DEPOSIT SCHEMES

COLLECTING

SORTING

**Intrinsic and Extrinsic values act in opposition; strengthening one weakens the other.**



**Common Cause**

The Case for Working with our Cultural Values

September 2010

COMIN

Oxfam

WWF



## Demonstrating Conflicting Values?

*A careful evaluation of the narratives used in our everyday lives as consumers reveal that the package of narratives used are **collectively contradictory**.*

*In the context of ethical and environmental narratives,  
..we purchase **water-intensive Fairtrade organic fruit and vegetables** that are **imported huge distances** by air transport from countries prone to **drought**."*

P. Haynes (2015) ,Consuming Sustainability Narratives, in *Advances in Consumer Research*, 43, 364-367.

## How to move to Sustainable Consumption?

<http://www.srfood.org/en/how-to-move-to-sustainable-consumption>

*"Much of what we consume remains fueled by status competition and the **quest for social recognition** and acceptance: this suggests that in order to make progress in **curbing excessive consumption** and its impacts on **sustainability**, we may need to **reconceive consumption** not merely as a matter of **individual choice** but as one of **social norms** that is tied in with broader efforts to achieve **social justice**.*

*-If **social norms** are such a big driver of consumption, **how can these norms be made to evolve**?*

*-How can **technological** change be **reoriented** around **sustainability**, instead of the never-ending quest for economic efficiency, increased labor productivity, and profit maximization for technology owners?*

*-How can **markets** be **reshaped** in order to favor the shift to more **sustainable consumption** patterns, sometimes referred to as **voluntary simplicity**?"*



Olivier de Schutter, UN Special Rapporteur 2008-2014

## Douglas Holt (2012): Another way towards Sustainable Consumption?

- *Extremely difficult/will take too long to dislodge the **Dominant Consumerist Market Paradigm***
- *But, its not necessary; Use **marketing tools** to change **behaviour** (and elicit sustainable consumption tipping point), as with introduction of **plastic bottled water** from the 1980s, which was not down to drinks companies, but due to:
 
  - *Fears over **tap water safety** following high profile incidents*
  - *1988 NYTimes article suggesting experts recommend people drink **8 glasses water/day** to remain **hydrated***
  - *1990/2000s narratives around **obesity** and **sugary drinks****

D. Holt (2012) Annals of the American Academy of Political and Social Science, Vol. 644, pp. 236-255

## Popularising & Embedding Sustainable Consumption?

### CONSUMER

#### Supermarkets join free water campaign

By Tom Bawden  
ENVIRONMENT CORRESPONDENT

Morrisons, John Lewis and Heathrow Airport are offering free drinking water after joining a nationwide campaign to reduce plastic waste.

Anyone with a reusable cup can fill it in over the counter at the supermarket chains' cafés, while dozens of fountains will be dotted around the west London airport.

They join Greggs, Costa, Starbucks and other outlets which have set up more than 12,000 water refilling stations across the country since the campaign kicked off in January.

The Drinking Water Refill initiative is being co-ordinated by industry association Water UK.

It has commissioned research showing that 85 per cent of the British population is worried about plastic waste.



Find **water** on the go

Free Refill Stations on a street near you.

Get the App