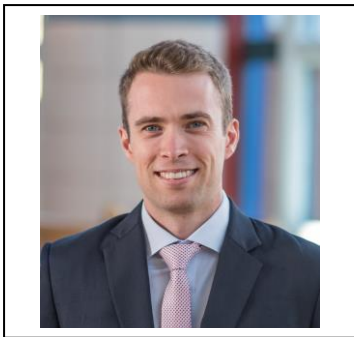




2020 Cambridge - McKinsey Risk Prize

Bio-sketch and Photo Page



Student Name: Bradley Lloyd Gibb

Email contact: Blcg2@jbs.cam.ac.uk

Title of Submission: All bottled up, lifting the lid on plastic risk in the UK beverage industry

I am a candidate for the degree: MBA

Bio-sketch

I am an MBA candidate at the Judge Business School.

A qualified accountant, I have spent my 10-year professional career in finance and accounting roles within the FMCG industry. The majority of career has been spent at Coca-Cola Amatil, where I joined on the Corporate Graduate Programme in Sydney, Australia. During my tenure at Coca-Cola Amatil I had the opportunity to work across a number of developed and developing markets.

I first discovered an interest in plastic use as Commercial Manager – Group Procurement, where I supported the purchase of both virgin and recycled PET resin across 6 countries. I have continued a passion for sustainability and plastic waste and am currently assisting Nestle, through the MBA on a Global Consulting Project, investigating the design of container deposit return schemes in North America.



2020 Cambridge - McKinsey Risk Prize

Declaration Form

Student Name: Bradley Lloyd Gibb

Email contact: Blcg2@jbs.cam.ac.uk

Title of Submission: All bottled up, Lifting the lid on plastic risk in the UK beverage industry

Number of words of submission: 4,083

I am a candidate for the degree: MBA

Academic Institution/Department: Judge Business School

Declaration

I confirm that this piece of work is my own and does not violate the University of Cambridge Judge Business School's guidelines on Plagiarism.

I agree that my submission will be available as an internal document for members of both Cambridge Judge Business School and McKinsey & Co's Global Risk Practice.

If my submission either wins or receives an honourable mention for the Risk Prize, then I agree that (a) I will be present¹ at the award presentation ceremony 23 June 2020, (b) my submission can be made public on a Cambridge Judge Business School and/or McKinsey & Co websites.

This submission on risk management does not exceed 10 pages.

Signed

Bradley Gibb (electronic signature)

¹ If the Risk Summit is a virtual event, I will join live online

All Bottled Up

Lifting the lid on plastic risk in the UK beverage industry



Bradley Gibb
April 2020

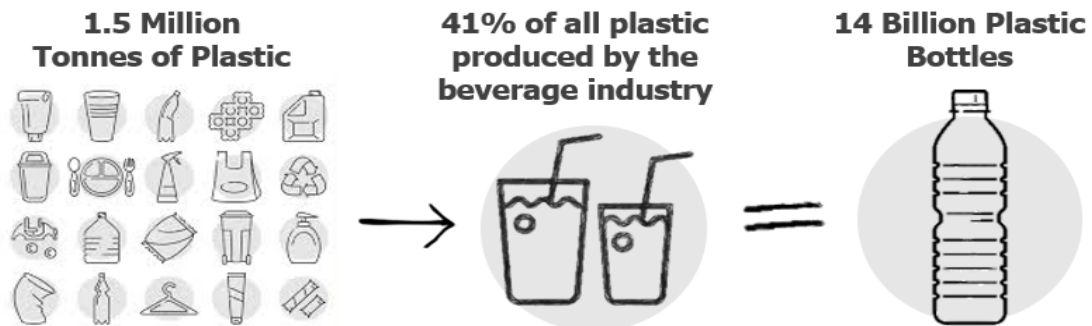
Abstract: Plastics represent a serious ESG challenge for beverage companies within the UK. Increasing headwinds from consumer awareness, coupled with government legislation imposing greater producer responsibility, will severely impact the economics of the beverage industry operating model. This paper describes and addresses the financial effects of four identified plastic risks; plastic permissibility, container deposit return schemes, plastic taxes and plastic bans. In a worst-case scenario, the cumulative impact from these risks are modelled at a cost of £688m per year by 2024. Several possible mitigation activities are discussed to counter the potential impacts of these risks.

Today, 150 years after its original invention, plastic waste is suffocating the world’s oceans - by 2050 the Ellen MacArthur Foundation estimates that there will be more plastic in the world’s oceans, by weight, than fish². It is hard to believe that plastic was first responsible for saving wildlife. The first synthetic polymer, created in 1869, benefited the natural world by reducing demand for products such as elephant tusks and whalebone. It also meant that people were no longer bound by the scarcity of natural resources, since plastic could be made on-demand. And so, the plastic revolution began³.

Plastics have become synonymous with consumerisation and the modern economy; our society has taken full advantage of their unrivalled functional properties and low cost. With current growth rates estimated at a 3-5% CAGR⁴, global plastic use is set to double during the next 20 years to 700m tonnes per annum.

First used for milk bottles in the 1950s, by Coca-Cola and Pepsi in the 1970s, the UK’s non-alcoholic beverage industry with £7.5B annual revenues⁵ has embraced plastic (PET). The growth of PET is associated with increased consumption of ‘on-the-go’ food and beverage products, such as carbonated soft drinks, water, sports drinks, and juices. Per the British Soft Drink Association, plastic beverage containers represent 71.7% of all beverages sold in the UK – 14B plastic bottles annually⁶.

Exhibit 1
UK Annual
Consumer
Plastic
Consumption



² World Economic Forum, Ellen MacArthur Foundation and McKinsey & Company, 2016. The New Plastics Economy.

³ Tarrant, 2019, The Rising Cost of Rubbish. Acuity Magazine, Volume 6, Issue 5

⁴ Jefferies Research. Powell, 2020. Drowning in Plastic - Who Sinks, Who Swims?

⁵ IBIS Market Research. Kotze, S. 2019. Soft Drink Production in the UK (No. C11.071).

⁶ Packaging Summary - BSDA [WWW Document], 2019. URL <https://www.britishtsoftdrinks.com> (accessed 25/03/20)



PET has been a popular choice for beverage manufacturers due to its lightweight, recyclable properties, low cost and ability to be used for both still and carbonated products. Trystan Farnworth, Head of Sustainability at Britvic (the UK Pepsi bottler) stated that “PET plastic is the dominant packaging format for soft drinks in GB retail, and manufacturer’s supply chains are invested accordingly”⁷. Over the last 25 years UK beverage companies have heavily invested capital into PET bottling lines; with a number of savings vis-à-vis aluminium cans and glass bottles. These include the elimination of empty container transportation (as small test tube like preforms are transported to the beverage company and subsequently blown into bottles on the production line), ease of handling, improved technical performance and longer shelf life.

Exhibit 2
Beverage companies with the largest exposure to plastics

Soft Drinks	Water	Functional Beverages	Juice
Market Share Coca-Cola European Partners Great Britain Ltd 34.5% Britvic plc 14.5% A G Barr plc 4.8%	Market Share Nestle Waters UK Ltd 12.6% Highland Spring Ltd 9.2% Princes Limited 4.6%	Market Share Britvic plc 27.1% Coca-Cola European Partners Great Britain Ltd 22.3% Lucozade Ribena Suntory Ltd 15.7% Refresco Group NV 8.6%	Market Share Innocent Ltd 39.4% Multiple Marketing Ltd 5.3%
Revenue £4.5bn Profit £401.1m	Revenue £1.2bn Profit £67.9m	Revenue £1.3bn Profit £114m	Revenue £414.1m Profit £6.2m

Source: IBIS Data, 2019

INCREASED PLASTIC AWARENESS – ‘THE DAVID ATTENBOROUGH EFFECT’

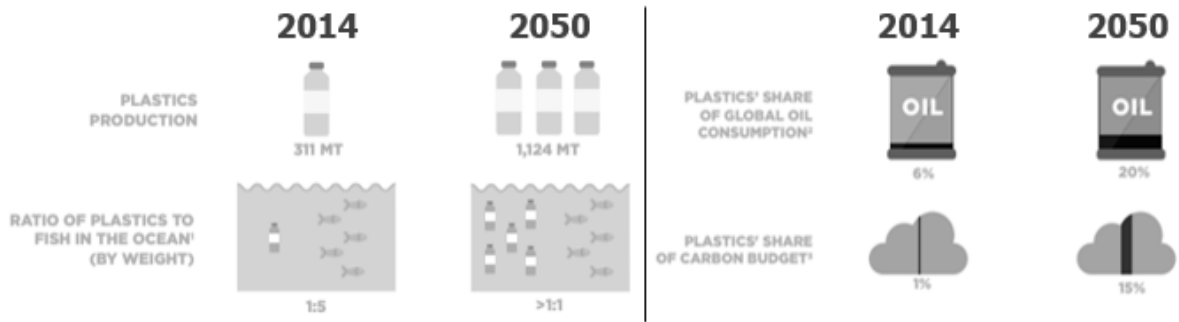
Nearly everyone, everywhere encounters plastics daily – especially plastic packaging. Until recently, plastic enjoyed a sort of anonymity in ubiquity. However, consumers are becoming more conscious of the environmental problems posed by plastic and are being inundated with messages about plastic awareness in virtually every area of their lives.

Messages about plastics are focussed on three areas: its impact on the natural environment (especially oceans), carbon emissions resulting from its production and after-use incineration and health impacts from using plastics (e.g. BPA use in plastic). The production and use of both plastics and plastic packaging, in particular, will spread the benefits of plastics to greater numbers of people and in ever

⁷ Farnworth, Trystan. Head of Sustainability at Britvic. Interview conducted: 03/03/20

more useful applications; however, if production and use continue at current trajectories negative externalities will be exacerbated, as laid out in Exhibit 3.⁸

**Exhibit 3
Plastics Volume
Growth and
Externalities**



Credit: World Economic Forum, Ellen MacArthur Foundation and McKinsey & Company, 2016. The New Plastics Economy

The champions driving increased awareness come from a multitude of sources; celebrities, documentaries, art installations and social media challenges such as Plastic Free July. ‘Among the collection of pressures that cause the ebb and flow of public opinion, Sir David Attenborough’s second instalment of Blue Planet was perhaps the most impactful in generating a surge of interest in plastic pollution and recycling’⁹. References to the ‘David Attenborough Effect’ have been used to explain why public opinion had shifted against plastic so decisively. Since airing in November 2017 worldwide google searches for “plastic waste” have reached all-time highs¹⁰.

Within the UK, beverage packaging is in the crosshairs of the plastic awareness movement. Examples of such awareness drives include Extinction Rebellions ‘2019 Operation Plastic Attack’ and annual reports from the UK Marine Conservation Society¹¹, where beverage containers and their component parts regularly feature in the top 10 items found. In December 2017, the UK Environmental Audit Committee (EAC) issued a report on plastic litter: ‘Plastic bottles: Turning back the Plastic Tide’, noting an ‘increasing public appetite for urgent action in this area’.¹²

THE COMPLEX AND FRUSTRATING REALITY OF RECYCLING PLASTICS

The management of packaging waste, in a way that can benefit both the environment and corporations, faces many unresolved challenges:

1. Plastics recycling credentials

PET is not a 100% recyclable material unlike aluminium and glass, which can be melted and reformed a nearly infinite number of times¹³. Plastics typically degrade in quality during the recycling process. Recycled plastics are often repurposed and become polyester clothing fibres, road fillers or plastic parts.

⁸ Ibid. 1

⁹ Hayns-Worthington, S., 2018. The Attenborough effect: Searches for plastic recycling rocket after Blue Planet II [WWW Document]. Resource Magazine. URL <https://resource.co/article/attenborough-effect-searches-plastic-recycling-rocket-after-blue-planet-ii-12334> (accessed 07/02/20)

¹⁰ HSBC Research. Laboy, C., Bucalo, A., 2020. Global Beverages - Beyond Plastic.

¹¹ Great British Beach Clean, 2016. Marine Conservation Society.

¹² Ibid. 8

¹³ Ibid, 9.

While this is a good re-use, this ultimately postpones rather than prevents plastic disposal to landfill or incineration. Each stage is essentially ‘a one-way ratchet towards landfill or the ocean’¹⁴.

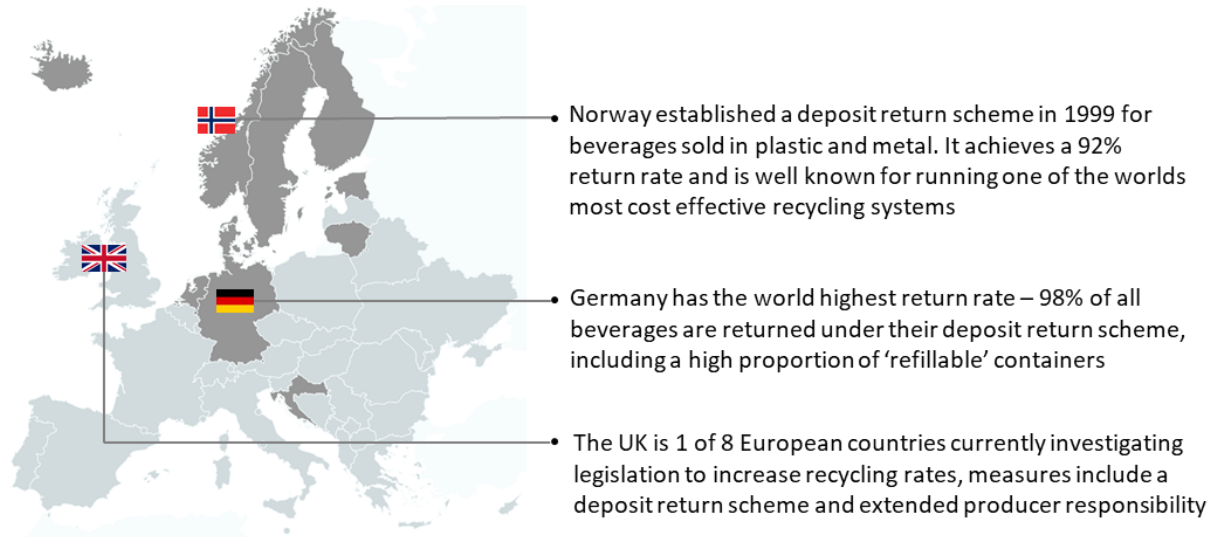
2. Beverage packaging

Large amounts of packaging produced today cannot be recycled in existing recycling systems as beverage packaging is not made from 100% recyclable content. This is especially true for multi-material packaging, which today poses a significant and unresolved challenge in recycling. Beverage giants, Pepsi, Coca-Cola and Nestle have recognised this, setting the goal to use 100% recyclable material by 2025.

3. Recycling rates

UK recycling rates for plastic packaging are relatively low. Data obtained by the Voluntary and Economic Incentives Working Group suggested that in 2016 74% of plastic drink bottles in the UK were collected for recycling. This significantly lags behind other European countries, which have taken more significant steps to introduce regulations to drive sustainability. There are currently 10 countries in Europe leading the charge through initiatives such as deposit return schemes and extended producer responsibility programs. Average beverage container return rates across these countries are in excess of 90%¹⁵.

Exhibit 4 European Countries Leading Recycling Legislation



4. UK recycling systems

With 1,705kg of CO² saved per tonne of PET that is recycled, rather than sent to landfill¹⁶, Coca-Cola and Pepsi are aggressively committing to recycled PET content targets. However, a senior manager at Coca-Cola Enterprises stated that a major challenge facing beverage companies was a lack of recycled PET supply, with “significant premiums on virgin resin being paid to secure supply”¹⁷.

A number of problems with the current system exist:

- The UK only has one industrial scale PET recycling plant (Lincolnshire), with PET production volumes far lower than UK beverage industry’s demand.

¹⁴ Buranyi, S., 2018. The plastic backlash: what’s behind our sudden rage – and will it make a difference? The Guardian.

¹⁵ Morawski, C., 2018. Deposit Systems for One-Way Beverage Containers: Global Overview. CM Consulting.

¹⁶ Barclays Research .Ogundiya, S, Patel, H. 2019. Plastic Waste: Don’t lose your bottle.

¹⁷ Senior Executive at Coca-Cola Enterprise - Anonymity Retained. Interview conducted: 26/02/20

- China’s restriction on imported waste since 2017 has made it less profitable to recycle – previously the UK would send recyclable content to Asia and receive back recycled PET.
- The process of recycling plastic is difficult, with additional hurdles in obtaining ‘food grade’ recycled PET. Plastic must be carefully sorted, as contamination of different plastic types renders end resin useless. Consequently, the UK’s recycling utilisation rate stands at 72% of content sent to facilities¹⁸.

As a result of the aforementioned issues, waste incineration is out-pacing recycling growth, as it represents the path of least resistance for local waste administrators. Between 2014 and 2020 the number of incineration plants in the UK grew from 26 to 40¹⁹.

THE ISSUE WITH SIMPLY SWITCHING TO OTHER PACKAGING TYPES

A switch from plastic packaging to glass or metal alternatives may seem like a simple and elegant fix to reduce plastic pollution. However, the numbers suggest that the extra energy needed to manufacture, and transport glass or metal beverage packaging would in fact lift the carbon footprints of supply chains – at a time when many companies are trying to do the opposite. Plastic is such a lightweight and versatile product that, on the basis of energy, water, and carbon measures, it scores surprisingly well²⁰.

Exhibit 5 Key UK Beverage Companies and Recycling Targets



Using paper and cardboard instead of plastic adversely affects water consumption. The production of paper and cardboard requires a relatively large amount of water.

Using cans instead of plastic adversely affects energy consumption. High temperatures are required to produce metal and aluminium, which makes the production process very energy intensive. Transport of empty cans to production sites also increases CO2 emissions.

Using glass instead of plastic adversely affects energy consumption. Glass is heavy, and a relatively large amount of packaging material is needed per unit of product. Melting glass also requires a lot of energy. Transport of empty bottles to production sites also increases CO2 emissions.

Source: ING, 2019

PLASTIC RISKS TO THE BEVERAGE INDUSTRY

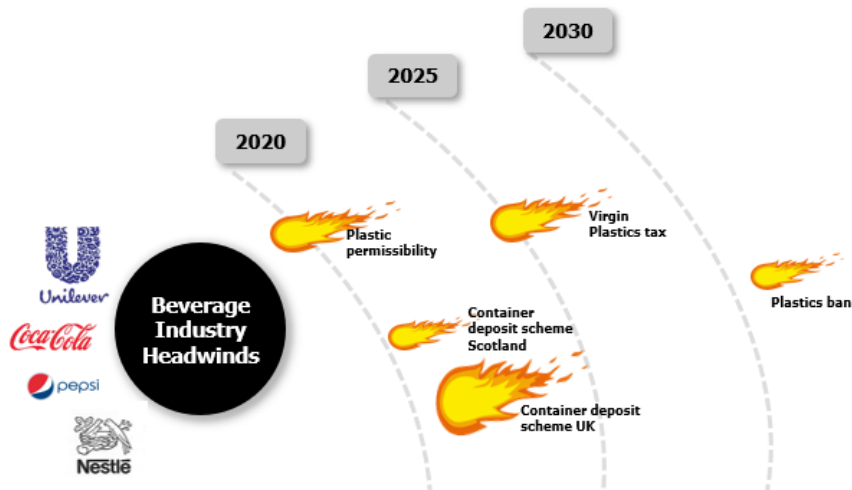
Beverage companies have faced a number of challenges over recent years, from UK sugar taxes to labelling change requirements. Unlike previous challenges, overcoming plastic headwinds may be far more difficult for the industry, with the velocity of plastic awareness and its inherent risk only accelerating in 2020 and beyond.

¹⁸ WRAP, 2018, Banbury, PlasticFlow 2025: Plastic Packaging Flow Data Report Prepared by Valpak, Verde and Recoup

¹⁹ Behr, J., Brassel, J., 2019. The Tipping Point. DS Smith.

²⁰ ING Economics Department . Geijer, T., 2019. Plastic Packaging In the Food Sector.

Exhibit 6
**The Velocity
of Plastic
Headwinds
is Increasing**



Risk 1: Plastic Permissibility

Plastic permissibility refers to the detrimental effect on sales/potential reputation damage due to the negative societal perception of plastic packaging. In the UK, it is clear that this risk is already displaying itself. Currently, though only impacting beverage organisations on a small scale, individuals are either cutting down on one-way plastic beverage bottles use or avoiding it all together. In an ING survey²¹ on plastic packaging, 7 out of 10 Europeans stated they expect to use less packaging in the next two years.

The biggest financial threat to beverages companies is the mainstream adoption of re-fillable/re-usable beverage bottles. A study by Inside Packaging²² suggested that 1 in 5 consumers within the UK had purchased a reusable water bottle in the past 12 months. The same survey suggested that over half of these purchases were made to reduce the plastic use.

In locations around the world local councils are adopting water refill stations to encourage consumers to re-fill rather than re-purchase. As a result, any impact on beverage sales from plastic permissibility is likely to have the largest impact on the bottled water industry.

Risk 2: Deposit Return Schemes

A deposit return scheme (DRS) is a system whereby consumers pay an up-front deposit on a sealed drink at the point of purchase, which is redeemable upon return of the empty drink container. Having been implemented in several countries, DRS schemes offer a well-trodden path to reduce littering and increase recycling rates.

Scotland is expected to launch a scheme in 2021, followed by the rest of the UK before the end of 2023. While most elements of scheme design are yet to be finalised, the current proposed deposit fee of 20p per beverage container is one of the highest in the world. The inevitability of the UK scheme, coupled with DRS's ability to increase the acceptance of plastic packaging, has led to widespread support from beverage companies - "the soft drinks sector recognises and fully supports the need to take action to reduce levels of plastic waste littering"²³.

²¹ Ibid, 17.

²² Inside Packaging, 2019. , Reusable water bottle sales soar as consumers reject plastic (No. 44)

²³ Packaging Summary - BSDA [WWW Document], 2019. URL <https://www.britishsoftdrinks.com> (accessed 25/03/20).

Beverage companies stand to gain from increasing quality and purity of collected DRS material, having a positive benefit for recycling throughput. This has the potential to increase recycled PET supply and reduce cost. A senior executive at Coca-Cola Amatil, stated that a recent DRS scheme introduced in Australia had increased recycling rates, however Coca-Cola had failed to negotiate first right of access to the recycled material, thereby missing an opportunity to fully close the loop.²⁴

This increase in the quality of recycled material comes at a cost, with funding for a deposit scheme requiring considerable amounts of public and private money to improve collection systems and recycling facilities. Joachim Amland, Senior Vice President BD, Tomra (world leader in reverse deposit vending machines), commented that “revenues from DRS are often insufficient to cover the costs – with revenue from unredeemed deposits and producers fees the most common scheme design to making up the deficit in successful schemes”²⁵.

Risk 3: Virgin Plastic Tax

Environmental groups around the world are calling for plastic usage to be taxed more broadly. In the 2018 budget the UK announced the planned introduction of a world leading tax on the production and importation of plastic packaging from 2022. The purpose of the tax is to provide economic incentive to use recycled material, in turn creating greater demand (DEFRA, 2019).

While still in consultation, the planned bill would tax plastic packing which did not contain greater than 30% recycled content at a rate of £200 per tonne.

Risk 4: Total Beverage Container Plastic Ban

While unthinkable a decade ago, the scenario of a complete ban on plastic beverage containers is a possibility today. The past 5 years has seen towns such as ‘Concord, Massachusetts, US and Bundanoon, Australia already banning bottles, as have numerous public parks, museums, universities, and zoos in Europe and the United States’²⁶, including the UK Parliament. Activists are zeroing in on the bottle as next in line for banning, after plastic shopping bags, which are currently banned in 74 countries.

While there has been no action against banning plastic bottles at a national level, a number of governments have set zero-waste objectives, including Wales by 2050. Naturally, this begs the question of where plastic bottles will fit in a future zero-waste society. While the medium term probability is low, the financial impacts of completely switching packaging materials and setting up new supply chains would be extremely costly with aluminium the most likely short term alternative.

²⁴ Coca-Cola Amatil Executive, Anonymity Retained. Interview conducted: 11/02/20

²⁵ Joachim Amland, Senior Vice President, Tomra. Interview Conducted 23/03/20

²⁶ NatGeo UK, 2019. How the plastic bottle went from convenience to curse [WWW Document]. National Geographic. URL <https://www.nationalgeographic.co.uk/environment-and-conservation/2019/08/how-plastic-bottle-went-miracle-container-despised-villain> (accessed 28/03/20).

FINANCIAL IMPACT ASSESSMENT

Plastic Permissibility

A base case and low case scenario for revenue growth have been modelled to reflect potential consumer backlash against plastic use. EBIT impact assumed to be 10% of revenue modelled.

Normal Case Assumption:

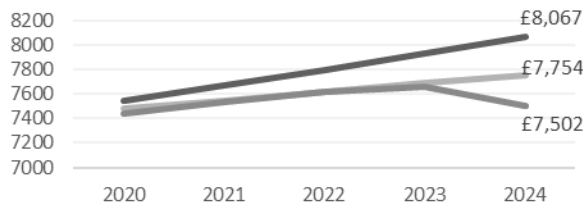
5 year growth rate from IBIS Beverage Industry Report

Base Case Assumptions:

Growth rate in beverage industry falls in line with UK population growth (0.9% per year).

Low Case Assumptions:

- 70% of drink sales are made in plastic beverages
- Refillable stations become mainstream
- By 2024 sales impact grows from impacting 1 in every 50 bottles to 1 in every 10 bottles

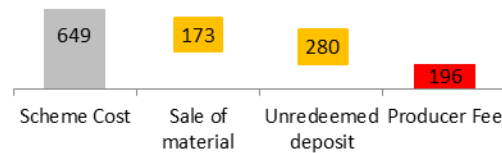


Ongoing EBIT Impact: £31m - £55m

DRS

One-off Costs: The UK Department of Food Environment and Rural Affairs¹ modelling has estimated that the UK beverage industry would incur £58m of one-off costs from DRS implementation in the UK, most notably for packaging changes including new barcodes.

On-going Costs: DEFRA modelling estimates a cost of £649m p.a. to operate the scheme. Schemes are funded from material sale, unredeemed deposits and producer fees. Based on an estimated 28 billion containers¹ and a redemption rate 91.5% the scheme does not require producer funding. However a likely case scenario of 95% redemption would require producer fees of £196m.



¹ DEFRA, 2019. Consultation on introducing a Deposit Return Scheme (DRS) in the UK.

Ongoing EBIT Impact: £0 - £196m

Virgin PET Tax

The beverage industry has led the way in utilising recycled PET within its products. Before the implementation of the planned tax (2023), Britvic and Coca-Cola will have already met the minimum UK threshold of 30% recycled PET.



Credit: Barclays, 2019

Assuming the remaining 50% of the industry lags the requirement, tax impact would result in the following:

Minimum Recycled Content	30%
Total R-pet or Tax Tons	84,000
Tax Value (worst case scenario)	£200/ton
Total Tax to Beverages	(£16.8m)
50% of the Beverage Industry	(£8.4m)

Ongoing EBIT Impact: £8m - £17m

Plastic Beverage Container Ban

Assuming the switch to aluminium as the next best packing material and based on Britvic's recent £100m investment in a production line producing 6,000 cans/min², the UK beverage industry would require a one-off investment of c. £440m to replicate the 14 billion plastic bottles lost.

Britvic Investment	(£100m)
Annual Cans Produced	3.2B
Total Industry Bottles Produced	14B
Investment Required to Replace	(£444m)

A significant on-going COGS impact is forecast based on a price differential of 3p between cans and PET as per Bottlescope³, taken over 14 billion bottles:

Difference (PET vs Ali) COGS	0.03p increase
Volume	14B
Total Cost	(£420m)

² Qureshi, W., 2018. New Britvic £100m investment helps produce 6,000 cans per minute. Packaging News

³ CleanMetrics Corp, n.d. Bottle Scope - PET comparison.

Ongoing EBIT Impact: £420m

MITIGATION ACTIONS

Step 1: Quick Wins

The 'quick wins' group of opportunities offers beverage companies activities where barriers are low and most of the work can be done by the individual company:

- The use of recycled PET is becoming more common place in beverage containers. Companies should look to set up procurement contracts to slowly increase the volume of recycled PET. Over time as the market continues to expand prices will drop. By increasing the use of recycled PET companies can ensure circularity, driving further acceptance of plastic.
- While PET container light-weighting has been common practice for years, there are still opportunities to reduce the plastic content in packaging. In the face of a plastic tax, companies should aggressively chase further innovation to drive 'phase 2' container light-weighting.
- To increase consumer acceptance companies should advocate the positive carbon/recyclability credentials of plastic through labelling and association with eco-friendly schemes. Many companies such as Coca-Cola are already doing this in innovative ways, see Case Study 1.

Step 2: Harder but doable

The 'harder but doable' group requires structuring a bottom up approach through collaboration with upstream and downstream partners:

- Provide packaging innovations which allow for multi-use applications, such as exploring the widespread use of fountain dispensing outside of fast food chains.
- Negotiate first right of use for the high quality recycled plastic material output from DRS, to realise financial benefits of closed loop plastic supply.
- Lobby for scheme design in the best interests of the UK beverage industry, i.e. the lowest cost. Best practice schemes include Norway and Finland where a consortia of beverage companies coordinate and operate the DRS.

Step 3: A paradigm shift

The final group of initiatives falls under the category of 'a paradigm shift'. These require system level changes where development and implementation costs are much higher:

- Increase economies of scale in chemical recycling and biodegradable plastic. Many companies including Nestle, Danone and Britvic are placing bets by investing in companies providing and researching these technologies. A 2019 YouGov study found that 50% of consumers in the UK would be willing to pay a higher price for goods in biodegradable packaging²⁷.
- Begin diversifying from plastic through other packaging types. Refillable (returnable), bottles, such as those used by Coca-Cola in Germany appear to be the next most economical option and the obvious tool for eliminating billions of bottles added to the waste stream annually.
- Vertically integrate across waste management/recycling to close the loop on circularity, see Case Study 3.

²⁷ Waldersee, V., 2019. Most Brits support ban on harmful plastic packaging | YouGov [WWW Document]. URL <https://yougov.co.uk/topics/consumer/articles-reports/2019/04/19/most-brits-support-ban-harmful-plastic-packaging> (accessed 29/03/20).

WHAT ARE COMPANIES DOING? – CASE STUDIES FROM AROUND THE GLOBE

Beverage companies do not have their heads in the sand in regard to the risks posed by plastics. There are several examples of companies employing mitigation strategies to protect against adverse impacts from the movement against plastic.

Case Study 1: Coca-Cola (Europe) – Pushing Plastic Sustainability

Coca-Cola recently unveiled its first ever sample recycled marine plastic bottle, demonstrating that one day ocean debris could be used in recycled packaging for food and drinks. The Ocean Clean-up estimate that today there are 5 trillion pieces of plastic waste in the world's oceans.²⁸ While the marine waste recycling technology has a long way to go before it is commercially viable, the marketing push reframes the plastic problem, with the technology showing that continued plastic use may be part of the solution in saving the world's oceans from plastic waste.

Case Study 2 – Perrier, Nestle – Investing in New Technology

In 2019 Perrier Water launched a sustainable innovation competition 'Next Packaging Movement'. The competition aimed to encourage the development of sustainable packaging solutions, in line with its goal of 100% recycled and recyclable packaging. Following the application process Perrier has invested in three start-ups: Biotect - biodegradable plastic from agricultural waste, Flexikeg - re-usable flexible kegs for water and other beverages and PlantiSkul - micro-factories for waste transformation. By doubling down on sustainable packaging Perrier is ensuring that they can leverage sustainable technology as a point of competitive advantage.

Case Study 3: Coca-Cola Amatil, Australia – Closing the Loop

Khaled Soufani, Director of the Circular Economy Institute at Cambridge University, stated that "Business models are not one-for-all, companies starting point is to invest innovation into circularity"²⁹. In November 2019 Coca-Cola Amatil took one such step, entering into a joint venture agreement with waste company Veolia to explore the development of a PET plastic processing plant in Australia. Coca-Cola Amatil is one of the world's leading recycled plastic users, with 7 out of 10 of its plastic bottles in Australia made from 100% recycled PET. In moving towards circularity, Coca-Cola Amatil has taken clear steps towards making its packaging more sustainable, meeting the wishes of consumers and preparing for future legislation.

FINAL REMARKS

What makes beverage packaging unique is its prevalence in modern life. Plastic awareness and its inherent risks will continue to accelerate, and beverage companies have to ensure that they actively manage these risks.

²⁸ The Ocean Clean-up., 2020. [WWW Document]URL <https://theoceancleanup.com/oceans/> (accessed 01/04/20).

²⁹ Soflani, Khaled. Head of the Cambridge University Institute of Circular Economy. Interview conducted: 05/03/20