



September 2021



Material issues

Big Food and the rise
of plastic-related risk

Investor brief

ClientEarth

ClientEarth

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Executive summary

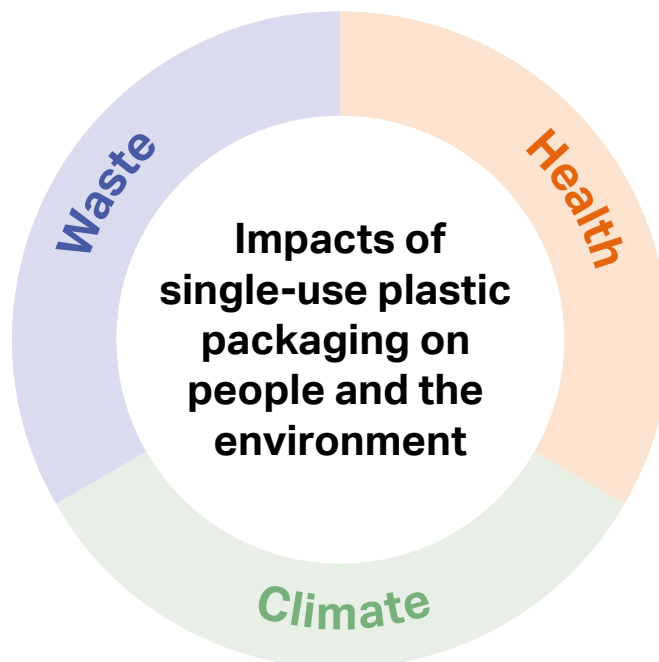
The plastics problem has reached crisis point. The powerful imagery of marine wildlife entangled in plastic waste that shocked the world is just the tip of the iceberg. Microplastics have been found deep in the oceans, in Arctic snow and Antarctic ice, in shellfish, salt and beer. Awareness is building on the significant climate cost of plastics. Research on the potential health hazards lurking in everyday packaging is accumulating.

Increasingly, citizens, scientists and policy makers are in agreement: the planet cannot handle any more plastic.

Plastic packaging has become a public enemy – and the packaged food and drink sector is in the spotlight. Blue chip food manufacturers and grocery retailers (or ‘Big Food’ as we term them in this briefing) face snowballing plastic-related risk. Policymakers are taking action at unprecedented speed, responding to widespread outrage from citizens around the world. The first wave of legal cases on plastic pollution have now been launched.

Despite legal obligations to disclose material risks to investors and other stakeholders – and in the face of warnings from market specialists, rating agencies, investors and financial institutions reinforcing the materiality of plastic-related risk - many names in Big Food are not reporting information about these risks to stakeholders. These failures could lead to legal action. Big Food is also not doing enough to mitigate these risks by addressing their addiction to single-use plastics, with many treating the issue as a PR problem rather than a serious source of risk to their business.

In this briefing, we take a deep dive into the relevant trends, policies and patterns coming out of Europe on three key aspects of the plastics crisis – waste, climate and health - analysing in turn the regulatory, reputational and liability risks of each one. Headline points include:



Headline points include:

Regulatory risk

A wave of new legislation has been introduced targeting plastic packaging waste through bans, restrictions and additional costs on corporate packaging-users. Member States are facing tougher targets for plastic recycling and decreasing plastic waste sent to landfill, along with a plastic levy on unrecycled plastic waste – all of which is set to feed into more restrictions and higher costs for companies.

The waste trade – which has long underpinned waste management in the Global North – is in troubled waters. More and more importers are closing their borders to plastic waste, citing the toll on the local environment and public health. Dealing with increasing volumes of plastic waste at home will add incentive to waste exporting governments to cut down on plastic waste at source and/or pass on higher waste disposal costs to companies contributing to the problem.

The vast majority of plastic packaging is made from oil and gas, in energy intensive processes. From cradle to grave, plastics emit greenhouse gases. Policymakers are increasingly viewing the transition to a circular economy and mitigating climate change as twin agendas: the carbon intensity of throwaway plastics is coming more into focus, and likely to lead to even stricter measures targeted at reducing them in the future.

The ever more urgent need to achieve emissions reductions spells trouble for plastic producers, with knock-on effects for Big Food. The phase-out of favourable regulatory conditions shielding plastic producers in the EU from the carbon price, along with uncertain market dynamics for fossil fuels (the feedstock for almost all plastics) could lead to an increase in costs for prolific users of single-use packaging.

Laws designed to protect consumers from hazardous chemicals are set to get tougher on food and drink packaging, with lobbyists in the packaging industry balking at commitments by the European Commission. This will cause disruption to packaging choices and processes for Big Food, likely leading to increased cost (compliance costs and/or packaging prices).

Reputational risk

The plastics backlash has mobilised at an unprecedented rate, with Big Food the most exposed to public criticism of all companies on the plastic supply chain. Risks of reputational harm are exacerbated by shifts in purchasing power to millennials, a generation that prioritises sustainability.

Plastic production is receiving increased attention from climate activists as the next frontier of fossil fuel infrastructure, spreading the message about the climate costs of plastics.

Public awareness of the potentially hazardous substances lurking in plastic packaging is high, and concern is escalating about the as-yet-unknown effects of microplastics in the human body, adding another reason for consumers to turn their backs on plastic packaging.

Legal risks

A first-of-its-kind legal case seeking to hold major food manufacturing companies responsible for marine plastic pollution has launched in the US, along with a number of cases relating to companies' sustainability claims (including on plastic packaging). Regulators in the EU and the UK are bolstering consumer protection guidance on environmental claims, making regulatory action on this topic more likely in future.

Climate litigation is breaking new ground in the courts. Plastic producers are already being challenged on expansion plans, whilst climate cases are establishing strategies and precedents that could be used against Big Food on plastics in future.

Concerns about health hazards associated with plastics have triggered comparisons to asbestos. Class actions on the health impacts of chemicals have proliferated in the US, and have started to shift 'downstream', from chemicals manufacturers to companies that use them in their operations. Legal commentators have suggested chemicals associated with plastics may be next in line for legal challenges.

Investors and asset managers should consider their own legal obligations in relation to plastic-related risk, including fiduciary duties to manage risk appropriately, statutory duties to consider the adverse impact of their investments on the environment and disclosure obligations.

Understanding what actions companies should be taking to reduce their environmental impacts and manage plastic-related risk is essential if investors and asset managers are to ensure compliance with these obligations – and be part of the solution to the plastics crisis. So far, meaningful action on plastics from Big Food players has been limited. Rather than committing to the only real answer to the problem – reducing their plastic footprint, including through implementing re-use and refill systems – companies have so far favoured investing in 'false solutions' to the plastics crisis.

With the walls closing in on single-use plastic, the investment community must act now to:

- demand more transparency on their exposure to risks relating to single-use plastics;
- challenge the ambition of corporate targets; and
- scrutinise the adequacy of the policies in place to achieve them.

False solutions:

Technologies that are unproven at scale, waste management processes for plastics that raise serious environmental concerns, substituting one single-use material for another, "clean-up" activities that do nothing to address the source of plastic waste, "plastic offsetting" schemes, hampered by the same limitations and concerns as carbon offsetting, and "downcycling" plastic products into materials that cannot then be recycled themselves.

Introduction

Increasingly, citizens, scientists and policymakers are in agreement: the planet cannot handle any more plastic.

30ft



wide road to the moon could be paved if all the plastic waste generated in 2020 alone were melted down¹

9%



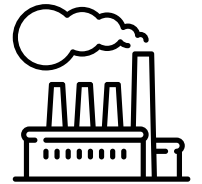
of plastic waste ever generated has been recycled³

30kg



of plastic packaging per person per year thrown away by Europeans²

189



coal-fired power plants' worth of emissions generated from plastics production in 2019³

Packaging is the largest single application of plastic – most of which is used only once and then thrown away. The major food manufacturing and grocery retail companies at the heart of today's globalised food system therefore play an outsized role in the plastics crisis. Plus, they have much to lose from the global squeeze on single-use plastic.

The purpose of this briefing is to arm investors and asset managers with knowledge on the plastic-related risks faced by investees in the packaged food and drink sector.

We home in on Europe,ⁱ exploring in particular the legislative initiatives and policy plans of the European Union (EU), which are set to affect food manufacturers and grocery retailers from multiple directions. We also assess the lay of the land on consumer concern over plastics, as well as identifying the trends in environmental and consumer protection litigation that are already seeing single-use plastics deliberated in the courts.

ⁱ By 'Europe', we mainly mean the 27 EU Member States but also countries that are directly and indirectly affected by EU legislation, such as European Economic Area members (like Norway) and the UK (which still applies much EU legislation).

Background

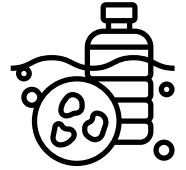
The global campaign against plastic waste has been described as “one of the fastest growing environmental causes ever mounted”.⁴

In the space of a decade or so, the topic has risen meteorically on the international environmental agenda, provoking discussions at the highest levels of government, reaching the top spots in rankings of the most pressing public concerns and mobilising protest groups all over the world.

Despite this unprecedented global response, when we looked into the information companies on the plastics supply chain were sharing with investors and other stakeholders on this issue three years ago, we found that many were not disclosing their role in plastic pollution as a financially material risk.

To help address this knowledge gap, in our 2018 report, ‘Risk Unwrapped’, we set out the risks faced by companies contributing to plastic pollution. These included proposals for laws across the globe to restrict plastic use, the rising tide of consumer concern on plastic waste and the threat of lawsuits.

Microplastics have been found in the most remote geographical locations, in human placentas and in our food



In the three years that have passed, the risks we identified have escalated and some, as we predicted, have begun to materialise. Laws have been drafted and come into forceⁱⁱ and the spectre of litigation has evolved into live cases in the courts.ⁱⁱⁱ Scientific research has also advanced, providing further evidence on the ways that plastics disrupt processes critical to human survival on Earth. Microplastics have been found in the most remote geographical locations,⁵ in human placentas⁶ and in our food⁷. Reports have exposed the links between the fossil fuel industry and plastic production, and the role of plastics in climate change;⁸ research on how chemicals present in plastics affect human health has been widely reported on in the media.

Our findings on the risks faced by companies with a large plastic footprint have also since been echoed by multiple commentators, including the likes of HSBC,⁹ MSCI¹⁰ and UN Environment Programme Finance Initiative¹¹ warning of stranded plastic production assets, skyrocketing regulations to reduce plastic pollution, and evolving liability claims.

“Just like climate-change related risks... plastic pollution risks can affect insurance and investment portfolios in the form of physical, transition, liability and reputational risks.”

UN Environment Programme Finance Initiative (Principles for Sustainable Insurance).
Unwrapping the risks of plastic pollution to the insurance industry, November 2019

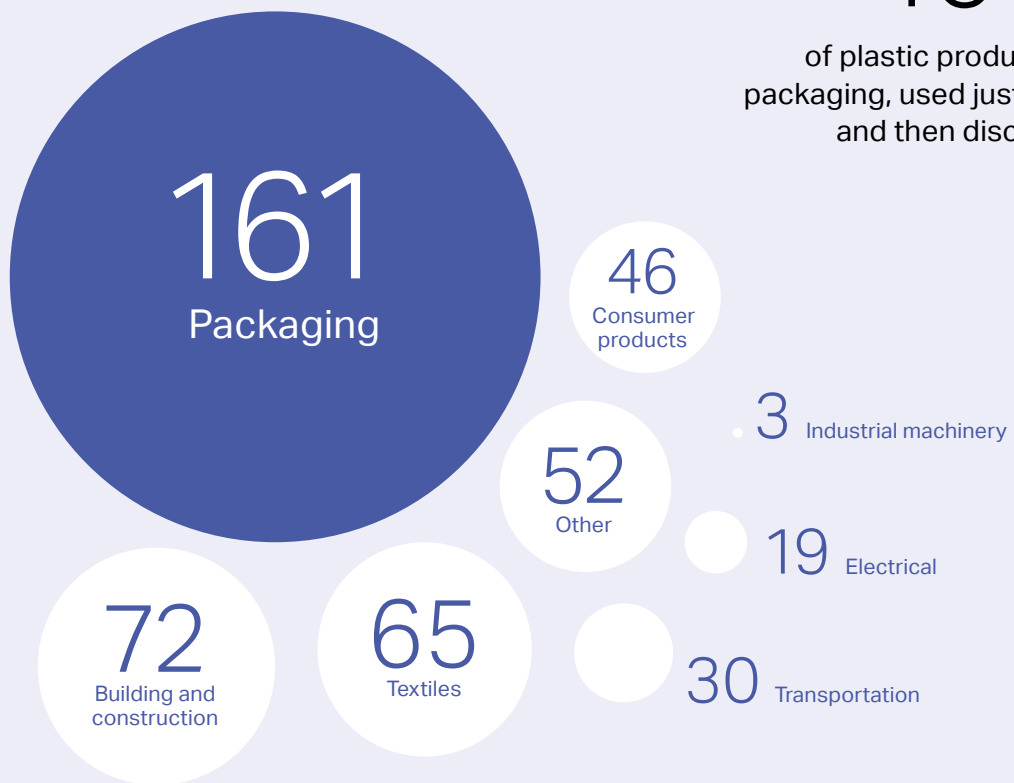
ii Including, for example, EU Directive 2019/904 on the reduction of the impact of certain plastic products in the environment. The deadline for transposition of the EU’s packaging and waste reforms (Directive 2018/850, Directive 2018/851 and Directive 2018/852) has now passed too. Other Member States have taken legislative action too. For example, French law no. 2020-105 of 10 February 2020 on the fight against waste and the circular economy.

iii For example, in February 2020, US NGO Earth Island Institute lodged a claim against ten companies for their contribution to plastic pollution. See: <https://www.earthisland.org/journal/index.php/articles/entry/earth-island-coke-pepsi-nestle-plastic-pollution-lawsuit/>. In December 2020, a US District Judge approved a settlement of \$50 million dollars in relation to a lawsuit relating to the illegal dumping of plastic pellets and other pollutants. See: <https://www.texastribune.org/2019/10/15/formosa-plastics-pay-50-million-texas-clean-water-act-lawsuit/>. Petrochemicals giant, Ineos, has also faced legal challenges to its application to extend a plastic production facility in the Port of Antwerp from ClientEarth. We won an injunction against the continuation of the project pending an update environmental application at the end of 2020. See: https://www.clientearth.org/latest/press-office/press/3bn-ineos-plastics-project-in-doubt-as-company-drops-inadequate-permit/?utm_source=twitter&utm_medium=social&utm_campaign=

Defining 'Big Food'

'Big Food': the fast-moving consumer goods companies and supermarket groups that dominate the manufacture and sale of packaged food and drink. Given the European focus of this briefing, the plastic-related risks described here are relevant to any Big Food company with a significant European market.

Global plastic production by industry
in millions of tonnes



Source: nationalgeographic.com/science/article/plastics-facts-infographics-ocean-pollution

Big Food sits squarely in the eye of the plastic-risk storm. Most plastic waste can be traced back to just a dozen fast-moving consumer goods companies (FMCGs),¹² with many of their products being purchased in hypermarkets and supermarkets.¹³ The colossal FMCGs and supermarkets that make up Big Food therefore play a disproportionate role in the plastic pollution crisis.

Despite this, and in the face of overwhelming evidence that pressures on plastics are spiralling, Big Food companies are not acting fast enough to mitigate these risks.¹⁴ What is more, many are still failing to disclose relevant, meaningful and decision-useful information on plastics to investors and other stakeholders – including on their exposure to plastic-related risk. Given the pace of change on plastics, these failures could threaten the continued financial success of Big Food.

In order to arm investors and asset managers with the information they need to engage with Big Food investees on plastics, in this briefing, we take a deep-dive into the plastic-related risk landscape for Big Food.

In 2020, then CEO of Danone Emmanuel Faber acknowledged that his company and its competitors had been “caught off guard” by growing packaging scrutiny.

Just Food, '[Packaging central to Danone's EUR2bn “climate-impact” spend](#)', 27 February 2020

In April this year, Moody's warned that “[l]ack of progress in reducing plastics” looked “set to hit supermarket share prices”.

The Grocer, '[Moody's: supermarket share prices at risk due to slow progress on plastic](#)', 28 April 2021

Briefing overview

In **Section 1** of this briefing, we set out our 'Plastic risk model' – a visual representation of the interaction between the different categories of risk, and other trends and factors that heighten Big Food's exposure to such risks.

The regulatory, reputational and liability risks that Big Food faces do not exist in isolation; they exacerbate one another. Mounting a public backlash on plastics generates reputational risks for companies, in turn triggering a policy response from regulators. Legal action against companies is often preceded by some kind of public corporate scandal or exposé implicating the same actors. An evolving regulatory framework gives rise to new avenues for holding plastic-polluting companies legally responsible.

Other external factors or 'risk drivers' aggravate these risks. These include matters such as scientific developments, changing consumer preferences, and legislative and liability trends. The plastic risk model shows the links between these different factors, also providing a visual guide to the detailed risk analysis we set out in Section 2.

In **Section 2**, we explore in detail the risks Big Food faces linked to three categories of impacts of single-use plastics:

Part I: Waste

Part II: Climate

Part III: Health

Our analysis mainly focuses on the trends, pressures and developments arising out of Europe. Aside from the high concentration of Big Food companies headquartered in the region, Europe is an important consumer market. The EU is also a standard setter on both consumer protection and environmental law – two fields of law highly relevant to plastic packaging. Through what has been termed “the Brussels Effect”, EU policies and regulatory standards are transmitted to other jurisdictions. This can occur as a result of adoption by foreign governments of similar laws, or through multinational companies choosing to apply a single standard to their products or conduct around the globe, usually for economies of scale.

Nevertheless, many of the policy priorities, public attitudes and legal developments we set out in this briefing are reflective of broader, global trends. Throughout the analysis, we give examples from outside the EU where relevant.

In each part, we explore the regulatory, reputational and liability risks arising from that category of impact, commenting on the links between the different types of risk, as well as giving examples of applicable risk drivers.

Finally, in **Section 3**, we set out our recommendations to investors and asset managers.

First, we set out the legal obligations triggered where plastic-related risk is material for investee companies, and remind investors and asset managers of their own relevant legal obligations.

Secondly, we describe the circular business models that Big Food companies' policies and targets should be directed towards achieving, as well as providing a brief overview of false solutions to the plastics crisis. This is intended to help the investment community scrutinise the credibility of company actions on single-use plastics.

To conclude, we set out specific single-use plastic policy and engagement recommendations for investors and asset managers.

1

**Big Food:
Plastic risk model**

Big Food: Plastic risk model

We have identified three fields of impact of single-use plastic packaging:

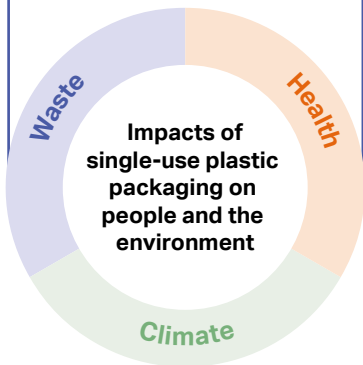
Waste

Climate

Health

We have divided the **physical impacts** of plastics and plastic pollution on people and the environment into three fields of impact:

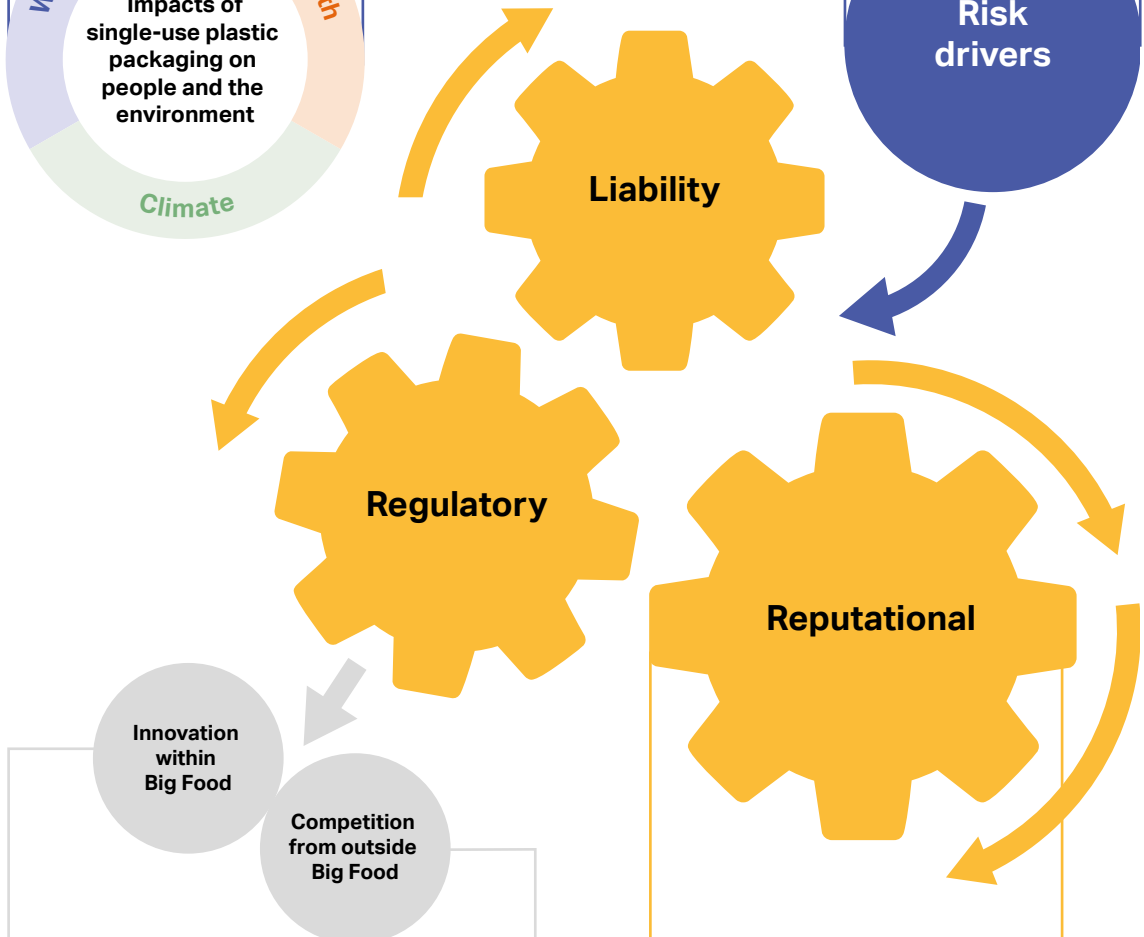
- Waste
- Climate
- Health



Risk drivers are trends that do not just affect Big Food, and do not just apply to the issue of plastics. They act to make these risks more likely to materialise and/or more likely to have severe consequences when they do.



Building momentum in each risk category feeds into others, exacerbating overall risk.



The greater the plastic-related threats to the business-as-usual operations of Big Food, the more likely challenger companies offering less plastic intensive/plastic-free business models emerge and compete for market share. Laggard companies also face competition from existing competitors acting more quickly and effectively on single-use plastics.

The Big Food sector is perhaps the most visible to consumers and the most dependent on public goodwill of all actors in the real economy. Brand value and customer loyalty have an essential role to play in their financial success. For this reason, Big Food is especially exposed to reputational risk.

Material issues
Big Food and the rise of plastic-related risk

The plastic risk model shows that each field of impact gives rise to a separate risk 'ecosystem': a distinct set of regulatory, liability and reputational risks. In turn, each category of risk within this system has an exacerbating effect on the others. For example, as consumer concern about a particular issue builds reputational risk, pressure from policymakers to respond with regulation also accumulates. This regulatory response may in turn provide new routes through which companies can be held legally accountable, and/or serve to underline in the public mindset that the targets of the regulatory action are responsible for the issue, thus aggravating reputational risk. Likewise, litigation plays a powerful role in increasing public awareness on issues. Even where a claimant is unsuccessful, it can result in significant reputational harm to a defendant arising from bad press and disclosure of internal documents. Cases in the courts can also prompt policy responses, rules and guidelines from legislators.

For each field of impact, there are relevant risk drivers. Risk drivers are sector and issue-agnostic – they do not just affect Big Food, nor do they only exacerbate risks relating to plastics. They form part of wider economic, regulatory and societal trends. Their effect is to make the risks that Big Food is exposed to more likely to materialise and/or more likely to have a severe impact when they do. Examples of risk drivers include changing consumer preferences, the role of social media, scientific developments and trends in global environmental regulation and litigation. Whilst Big Food can take actions to mitigate plastic-related risks, it is all but powerless to influence risk drivers. Relevant risk drivers are identified throughout the analysis in Section 2.

2



**The rise of
plastic-related risk**

Part I: Laying plastic to waste

Risks relating to plastic packaging waste in the environment

The “worldwide revolt against plastic” has mobilised at an astonishing rate since the issue first started hitting the headlines on a regular basis about five years ago.¹⁵ With each disturbing revelation about the environmental costs of plastic waste in the environment, consumer concern escalates. Increasing awareness of the social costs of accumulating plastic waste is compounding this – the links between plastics and human rights violations are now under the spotlight, with the UN Human Rights Council describing plastics as “an urgent and global...threat to human rights”.¹⁶

Calls for action from civil society and members of the public are growing louder. Policymakers in the process of implementing new legal measures to target single-use plastics are under pressure to up their ambition, in some cases, already planning for reforms to laws on plastics before legislation has even come into force. The first innovative cases on plastic pollution have already been launched, and a whole new area of legal risk is opening up for Big Food as NGOs, citizens and regulators take action on plastic-related greenwashing.

Regulatory risk

Waste legislation

In the EU, the main milestone since the publication of our 2018 report is the coming into force of the Single-Use Plastics Directive^{iv}, which sets out a series of measures that apply to the plastic items most commonly found on EU beaches. These measures range from outright bans on certain items, to labelling and design requirements, mandatory recycled content and extended producer responsibility (EPR) obligations. These provisions will affect Big Food in a number of ways. Some types of plastic packaging and single-use products will be banned outright. Others will need to be redesigned, and/or reformulated with recycled content. Crucially, EPR obligations will pass the end-of-life costs of some of the most common types of plastic packaging (including crisp and snack wrappers, drinks bottles, lightweight bags) back to the producers. This means that FMCGs and retailers (the latter in respect of their own-brand products) will have to meet the costs of waste collection, transportation, treatment, litter clean-up and even ‘awareness raising measures’ – i.e. warning the public of the detrimental effects their products have on the environment.

The Single-Use Plastics Directive is not the only significant legislative development in Europe. Revisions to key EU packaging and waste legislation were adopted in 2018 which aim to accelerate the transition to a circular economy. Amongst other revisions, the reforms mandate that by 2025, Member States will be required to ensure that at least 50% of plastic packaging is recycled^v – a tall order, given that at present, France, for example, only recycles around 25% of plastic packaging waste.¹⁷ Other revisions impose obligations on Member States to introduce measures to encourage reusable packaging,¹⁸ as well as widening the costs that producers will have to meet under EPR schemes,¹⁹ such as those mandated by the Single-Use Plastics Directive. The deadline for Member States to transpose these revisions into national law passed in July 2020, and yet consultations for further reforms kicked off only a few months later in September 2020, showing just how much of a movable feast EU packaging and waste laws are.

20-60%

increase in cost of plastic packaging predicted as a result of new plastics levy

What is more, Member State governments are now under pressure to act faster to reduce plastic waste. As of 1 January this year, EU Member States are paying €0.80 per kg of unrecycled plastic into the EU's budget – a measure intended to incentivise Member States to enact measures to reduce packaging waste.²⁰ Market experts, IHS Markit have predicted that internal taxes imposed by Member State governments to recoup these costs could result in a 20-60% increase in the price of plastic packaging²¹. As we explore below, this is not the only source of pressure to cut back on plastic waste as source.



^v Directive (EU) 2018/852 of the European Parliament and of the Council amending Directive 94/62/EC on packaging and packaging waste, Article 5(a)(g)(i)

Risk driver

Regulatory fragmentation

Many Big Food companies have significant markets outside the EU – but this does not mean they are shielded in those places from regulatory risk on plastics.

Globally, new laws banning or restricting single-use plastics are too prolific to list by name. The Federal Government in Canada recently added plastics to the list of toxic substances covered by its environment law, paving the way for single-use plastic bans promised last year.²² Following significant engagement with the EU, Japan has now passed its own law on single-use plastics.²³ The Association of Southeast Asian Nations also published a regional action plan for addressing marine plastics in May this year, with one of its focuses being policies for phasing out single-use plastics.²⁴

Even within the EU, since the Single-Use Plastics Directive and the reforms to other packaging and waste legislation take the form of Directives, Member States could (and already have) take different approaches to implementing them – again creating inconsistency in the regulatory framework for Big Food.

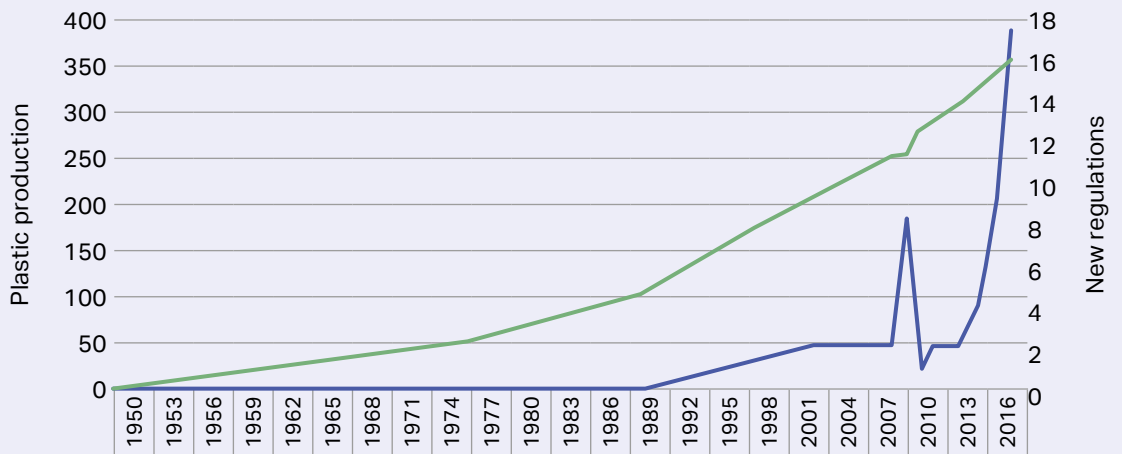
The proliferation of initiatives on single-use plastics creates a problem in itself for companies with an international footprint:

“For global companies like Nestlé, which sells food in 187 countries, that means complying with 187 different sets of national regulations on plastic packaging.”

National Geographic, ‘Global treaty to regulate plastic pollution gains momentum’, 8 June 2021

Regulatory fragmentation increases compliance costs for companies and can be disruptive to globalised supply chains.

Regulations enacted to reduce plastic waste increased significantly



Global plastic production, in million metric tonnes (left) Number of new national regulations on a single-use plastics (right)

Source: MSCI ESG Research, Statista, United Nations Environment Programme

Waste trade

Increased scrutiny on the waste trade is set to add fuel to the fire on policy initiatives to reduce single-use plastics at source.

At present, most countries in the Global North are only able to manage the vast amounts of waste they produce by shipping the excess to the Global South for processing. As the environmental and health problems generated by the waste trade pile up alongside mounds of plastic rubbish in importing countries, the EU and other governments are facing increased pressure to put a stop to this practice.

187

countries took a decisive step forward in addressing plastic waste at source by amending the Basel Convention

In 2018, public attention turned to the waste trade when China announced it was closing its borders to foreign plastic waste due to the ever-increasing environmental burden it was placing on the country. Other countries suddenly saw plastic waste imports boom following the Chinese ban, and have since moved to enact bans and restrictions of their own.²⁵ In 2019, 187 countries took a decisive step forward in addressing plastic waste at source by amending the 1989 Basel Convention on the Control of Transboundary

Movements of Hazardous Wastes and their Disposal to add mixed and unrecyclable plastic waste to the list of hazardous waste that can only be exported with the consent of the importer government. The European Commission subsequently committed to "ensur[ing] that the EU does not export its waste challenges to third countries" and is currently conducting a "thorough review" on EU rules on export of waste²⁶ with environmental organisations pushing for an absolute ban.

The waste trade: a toxic relationship

Recycling companies in the Global North, faced with waste they either cannot process due to limited capacity, or consider too expensive to process due to its poor condition, sell the waste on to companies overseas.

The recipient companies purchase the waste, seeking higher quality waste streams than can be obtained nationally. They may be able to turn a profit on the Global North's unprofitable waste due to lower costs associated with laxer environmental legislation or less vigorous enforcement, and cheaper labour. This can lead to illegal dumping of leftover waste or open burning of it, harming local businesses and public health. Workers involved in recycling efforts may be exposed to poor and even hazardous working conditions.

The waste trade leads to absurd results: Turkey, which can only officially manage around 10% of its domestic municipal waste, imported 11.4 million tonnes of waste from the EU in 2019 alone.

10%

of domestic municipal waste is officially managed by authorities in Turkey

11.4m

tonnes of waste imported from the EU by Turkey in 2019

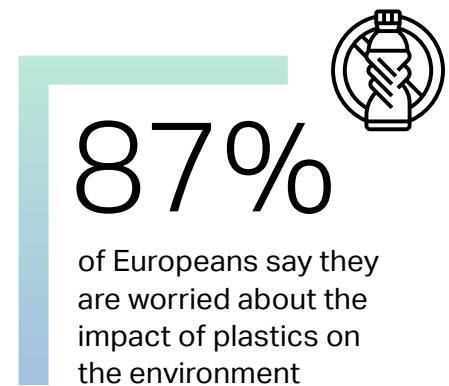
Source: <https://rethinkplasticalliance.eu/news/the-inherent-problem-with-the-global-plastic-waste-trade/>

To accompany the practical challenges facing waste exporters – such as legal restrictions and quality requirements for the waste concerned – there is a hefty incentive for governments in the Global North to accelerate the decline of the waste trade: public outrage. Over one million citizens around the world signed a petition supporting the amendment to the Basel Convention. The waste trade is a source of embarrassment for exporting nations, particularly as they increase the environmental ambition of their domestic policies, opening themselves up to accusations of hypocrisy.²⁷

So what does this mean for Big Food? Faced with needing to deal with increasing quantities of plastic waste themselves, lag-times in expanding domestic recycling infrastructure, targets to reduce the amount of waste sent to landfill and penalties to pay into the EU budget for each kilo of unrecycled waste, Member States and other waste-exporting governments are incentivised to stem the tide of single-use plastic waste at source. This means that Big Food should not expect a plateau in the measures on waste and packaging outlined above: the EU and Member States will have another compelling reason to take plastic-reduction policy even further in the coming years.

Reputational risk

Consumer concern over plastic waste has risen to dizzying heights in the last few years and shows no sign of abating. 87% of Europeans say they are worried about the impact of plastics on the environment.²⁸ A European-wide study conducted in 2020 found that 62% of respondents identified as either 'extremely' or 'very' engaged in reducing plastic consumption.²⁹ Plastic waste rates as the top concern amongst German consumers.³⁰



Big Food, biggest target

Of all the companies on the plastics supply chain, Big Food is closest to the consumer and so has unsurprisingly attracted the most ire on plastic waste. Large FMCGs have been exposed to public censure by the annual 'brand audits' coordinated by the global #BreakFreeFromPlastic movement in which thousands of volunteers around the globe collect plastic waste in the environment and record the brand behind it. Since the brand audit began, the same food and drinks manufacturers, including the likes of Nestlé, Unilever and Coca-Cola, have consistently ranked in the top ten. The results of the audit have attracted global headlines criticising the FMCGs involved, and even featured in an episode of HBO's popular show 'Last Week Tonight with John Oliver', which was viewed on YouTube by over 4 million people.³¹

Earlier this year, the UN Environment Programme published a report examining the human rights implications of marine litter and plastic pollution.³² The report makes clear that plastic waste is not just taking its toll on the planet, but also its people – especially in the Global South. Increasing awareness about this reality should be a particular source of concern for Big Food – it is only too easy to trace back the packaging items contributing these problems to the manufacturer due to the brand names plastered on them.



Photograph of Ukrainian waste collected by #breakfreefromplastic Brand Audit 2020 volunteers

Damage control?

One of Big Food’s strategies for mitigating the effects of consumer outrage on plastics has been to make public statements regarding their plans for addressing the plastic crisis – as John Oliver describes them, “splashy promises that we all so badly want to hear”.³³ Yet increasingly, this kind of public positioning is becoming a source of reputational risk in itself (as well as a source of legal risk – see more on this below). Research has shown that consumer scepticism on so-called ‘green claims’ can fundamentally harm the trust consumers have in the companies behind them.³⁴

Risk driver

Changing consumer attitudes and shifts in purchasing power

“This is the millennial moment, long expected and feared by companies that built their brands for baby boomers.”³⁵

It’s official: millennials are now “the world’s most powerful consumers”.³⁶ They have surpassed baby boomers as the most financially powerful segment of the population and according to Boston Consulting Group, they are “on the cusp” of their peak spending years.³⁷ Millennial and Gen Z consumers differ from their forebears in several key – and highly relevant – ways. These new generations of consumers “seek brands that are ethical, sustainable, and make a positive difference in the world”³⁸ and expect that companies act to protect “the health and interest of society”³⁹. They are also more likely to treat green marketing claims with scepticism.⁴⁰ What’s more, younger generations show a greater propensity to call out perceived corporate bad behaviour and make use of multiple digital means to do so. Last year, Forbes advised brands to “pay attention to cancel culture”,⁴¹ warning that “[a] single Tweet has the power to plummet share prices”.⁴² This warning was exemplified when Portuguese footballer Cristiano Ronaldo publicly rejected two bottles of Coca-Cola in favour of water at a press conference, reportedly shaving £4 billion off Coca-Cola’s share price.⁴³

£4bn

shaved off Coca-Cola’s share price, when Ronaldo publicly rejected two bottles of Coca-Cola in favour of water at a press conference.

Liability risk

The last few years have seen some important advances in environmental and human rights litigation that should put Big Food on watch for future claims relating to plastic pollution.

2020 saw a first-of-a kind lawsuit by an NGO against ten FMCGs for their contribution to plastic pollution. The case is making its way through the California courts, with the plaintiff having obtained an early victory in securing state jurisdiction for the case, boosting their chances of success.⁴⁴ In Europe, success for claimants suing parent companies for environmental harms and human rights infractions allegedly caused by overseas subsidiaries have made waves in the legal community.⁴⁵

Another burgeoning area of legal risk relates to claims regarding the “green credentials” of products or companies. A number of cases on the subject are currently making their way through the courts in the US and include challenges against FMCG Procter & Gamble for marketing a product as “plant-based”,⁴⁶ cleaning product company SC Johnson for labelling a plastic bottle as being made from “ocean plastic”,⁴⁷ and beverage company Keurig for describing single-serve coffee capsules as recyclable, despite most recycling facilities being unable to recycle them in practice.⁴⁸ In May this year, NGO Earth Island Institute filed a claim against the Coca-Cola Company for marketing itself as a sustainable company “despite being one of the largest contributors to plastic pollution in the world” – the challenge supported by the brand audit data referred to above.⁴⁹

170



Dutch companies investigated by the Dutch competition authorities in relation to sustainability claims

It is just a matter of time before these pioneering US cases – innovating with consumer protection provisions and environmental topics – inspire similar cases in Europe too. Regulators in the UK and the Netherlands are already trailblazing on the issue. This year, both the Dutch Authority for Consumers and Markets (ACM) and the UK’s Competition and Markets Authority (CMA) have issued robust guidance (the latter in draft) on sustainability claims made by companies, both of which contain statements applicable to claims often made about plastic packaging. The Dutch ACM has gone further, launching regulatory investigations into “sustainability” claims made by over 170 Dutch companies.⁵⁰

4%



of annual turnover – potential penalty for breaching EU consumer protection law with environmental claims

The EU is also gearing up to bolster the bloc’s consumer protection law to add further provisions on environmental claims,⁵¹ and soon, penalties could be levied without consumers even needing to make a claim. Following 2019 revisions^{vi} to the EU’s Unfair Consumer Practices Directive^{vii}, Member States are in the process of updating their laws on penalties for misleading consumers. Member States must set maximum penalties of at least 4% of a company’s annual turnover for certain violations with a cross-border element.⁵² The result may be that consumer protection bodies in Europe are soon imposing fines for greenwashing as steep as the multi-million euro fines regularly issued for GDPR violations.^{viii}

vi Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 as regards the better enforcement and modernisation of Union consumer protection law

vii Directive 2005/29/EC of the European Parliament and of the Council concerning unfair business-to-consumer commercial practices in the internal market

viii GDPR fines in the EU have already surpassed €300M, including multi-million euro fines for companies such as H&M and British Airways

Risk driver**Scientific developments**

Scientific research on the impacts of plastic waste has proliferated in recent years.

The occurrence of microplastics in marine ecosystems, organisms and the food chain has emerged in particular as a “research priority”.⁵³ Discoveries include, for example, that pathogens (disease-causing microorganisms, such as bacteria and viruses) are ‘hitchhiking’ on microplastics in the oceans, potentially spreading them to new areas;⁵⁴ and that microplastics may act as vectors for the spread of antimicrobial-resistant genes.⁵⁵ As more funding is channelled into this area, we can expect more scientific evidence and greater consensus from scientists on some of the suspected harms plastics cause in the environment.⁵⁶ This will not only provide further impetus for policymakers to identify and implement solutions, but this type of evidence could also inform lawsuits against the companies contributing to the plastics problem.

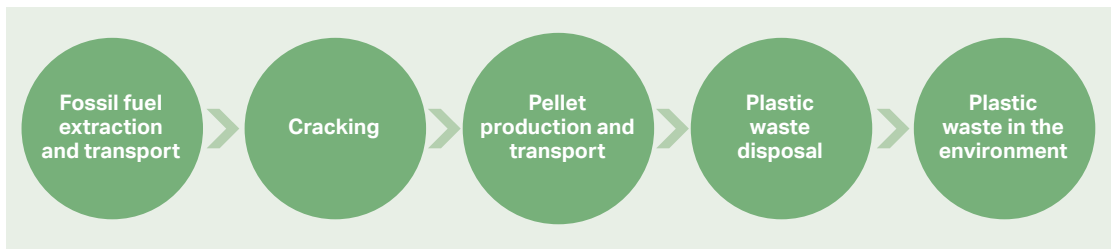
Part II: Plastic in a hot climate

Risks relating to emissions associated with plastic packaging

Greenhouse gas (GHG) emissions are generated throughout the plastics lifecycle in such quantities that their production, use and disposal threatens our ability to meet global climate targets. In its current form, the “plastic economy is fundamentally inconsistent with the Paris Agreement”.⁵⁷

Plastics contribute to climate change in the following ways:

- More than 99% of plastics are produced from fossil-fuel feedstock;⁵⁸ a significant – and increasing – proportion of global oil and gas production is associated with plastic production.⁵⁹
- Fossil fuel extraction, refining and transport are energy-intensive: in 2015, US emissions from extraction and transport for plastic production were equivalent to the emissions of 2.1 million passenger cars driven for a year.⁶⁰
- Plastic production is “enormously carbon intensive”.⁶¹ The GHG emissions attributed to the EU plastic sector amounted to 130 MtCO₂ – more than Belgium’s total emissions in the same year.⁶² In 2019, emissions from plastic production were estimated to be equivalent to that of 189 new 500-megawatt coal-fired power plants.⁶³
- Carbon from the fossil fuel feedstock is “locked into” plastic products, and is emitted as it decomposes in landfill or in the environment or released on incineration, which are the most common fates of plastic waste.⁶⁴
- In the past, the oceans have sequestered 30-50% of CO₂ generated from human activities, acting as a carbon sink. There is increasing evidence that marine plastic pollution is affecting the ocean’s ability to fulfil this function.⁶⁵



Shifting from emissions intensive linear models of consumption – of which plastic is an “iconic example”⁶⁶ – to a more circular economy is now viewed by the EU as a vital source of emissions reductions. Plastic production is attracting ever more attention from climate activists and policymakers as the next frontier of fossil fuel infrastructure. As the links between plastics and climate change become more widely understood, Big Food is being exposed to new sources of regulatory, reputational and legal pressure to reduce its use of single-use plastics and embrace circular business models.

Regulatory risk

In 2020, the EU formally adopted a legally binding target to achieve climate neutrality by 2050, with an interim target of a 55% reduction on 1990-levels by 2030. The bloc has a huge task ahead to achieve this and there is every indication that Big Food will feel the pressure from several angles.

Plastic packaging and the transition to a circular economy

First and foremost, the climate benefits that would arise from replacing single-use packaging with reuse are prompting policymakers to view climate mitigation and the circular economy as twin agendas.⁶⁷ Studies have demonstrated that reusable packaging produces far fewer carbon emissions than single-use counterparts, as reuse models reduce emissions associated with extraction, processing and waste.⁶⁸ For example, a 2019 study by the Ellen MacArthur Foundation and Material Economics found that switching to reusable bottles for household applications could result in an 80-85% reduction in emissions compared to single-use plastic bottles.⁶⁹

80%

reduction in emissions
when switching from
single-use plastic bottles
to reusable bottles



The communication on the European Green Deal highlighted the important role of the circular economy in achieving climate neutrality, calling out resource-intensive sectors like plastics in particular.⁷⁰ In its subsequent 2020 Circular Economy Action Plan, the European Commission described the transition to a circular economy as a “prerequisite” to achieving climate targets⁷¹ and the European Environment Agency (an EU body) homed in on plastics and the circular economy as

“[a] priority for action”.⁷² This suggests that Big Food should prepare for the compelling climate arguments for shifting away from single-use to add impetus for higher ambition packaging and waste legislation in the years to come.

Plastic production plants – “the next big carbon super polluters”⁷³

This is not the only way that climate clampdowns may affect Big Food’s on the topic of single-use plastics.

The chemicals sector – of which plastic production constitutes about one third worldwide – uses more energy than any other sector, and is the third largest overall source of industrial CO₂ emissions.⁷⁴ In 2018, the International Energy Agency advised that it demanded more attention from policymakers, describing it as a “key blind spot” in global emissions.⁷⁵ There are now signs that the ‘emissions anonymity’ of chemicals production could soon be at an end. In particular, revisions to the EU’s cornerstone law on emissions may mean that European plastic producers will have to pay for emissions on the EU carbon market for the first time since its inception.⁷⁶ This could affect the profitability of plastics production in the EU and quite possibly lead to an increase in the price of plastic packaging – one of the commodity prices to which Big Food companies are most exposed.

“Companies reliant on plastics could be exposed to climate change mitigation costs. Taxation and economic disincentives may impact these users of hydrocarbons, feeding through to the costs of plastics”.

Federated Hermes International, 'Investor Expectations for Global Plastics Challenges', April 2020

Another factor that could increase the price of plastic is the phase out of fossil fuels for combustion. Plastics is produced using the byproducts of processing oil and gas for energy purposes. As this declines, plastic producers will face drastically shifting market dynamics. In time, this is likely to change the economics of the industry in a fundamental way, making feedstocks and production processes more expensive for plastic producers and in turn, increase the price of the plastic itself.⁷⁷

Reputational risk

Plastic production is not just receiving increased focus from policymakers as a source of GHG emissions, but also from climate activists.

In the US, Taiwanese plastics company Formosa has been fighting battles on numerous fronts to try to secure the construction of the “Sunshine Project” – a “gargantuan petrochemical complex” in Louisiana, which would produce plastic materials for applications such as water bottles and grocery bags.⁷⁸ The Sunshine Project has not only been challenged as a fresh source of plastic waste, but also for its carbon-intensity: if the project goes ahead, it would be the largest new source of GHG emissions of any oil, gas or chemicals infrastructure in the US,⁷⁹ churning out emissions equivalent to an additional 2.6 million cars on the road each year.⁸⁰

On this side of the Atlantic, campaigns against petrochemicals giant INEOS' plans for “Project ONE”, a major expansion of existing plastic production facilities in the Port of Antwerp, have cited the carbon burden that the plant would impose on the region, increasing the annual emissions of the Port by 8.3% annually.⁸¹

Big Food may not be directly on the receiving-end of campaigns such as these, but it is still implicated. Until now, the carbon intensity of the plastic lifecycle has remained “a largely hidden dimension of the plastic crisis”.⁸² As plastic production attracts attention for its role in the climate crisis, Big Food should expect consumers to become more aware of the climate cost of single-use plastic.

Liability risk

Cases on climate change have now been filed in all six continents and at least 36 countries. The US, UK and EU are particular hotspots.⁸³ In some jurisdictions, the courts are acting more boldly on the threat of climate change than legislators. In 2019, the Dutch Supreme Court upheld a judgment that the government must reduce emissions in line with its human rights obligations.⁸⁴ This year, the Dutch courts again made history by ordering oil major Shell to reduce its net emissions by 45% by 2040, finding that its inadequate climate policy constituted a breach of its legal duty of care towards Dutch citizens.⁸⁵ Notably, in the judgment on the latter case, the Dutch courts found Shell responsible for its Scope 3 emissions i.e. including those resulting from the use of its products. This could provide a helpful precedent for future claims against companies on the subject of the environmental (including climate) impacts of plastic packaging.

Novel litigation strategies are emerging, including cases against corporates for damages caused by human rights, permit challenges, cases on misrepresentation of the impact of climate change, the defrauding of shareholders and greenwashing. To date, corporate defendants have mostly been oil majors, but other sectors are being drawn into the fray too. Both Formosa and INEOS plastic production projects have been challenged in the courts, the latter by ClientEarth.⁸⁶ Companies in the Dutch dairy sector have been challenged by regulators for claims relating to reductions in emissions and the 'sustainability' of milk.⁸⁷

Corporate failure to mitigate the impacts of climate change is increasingly becoming a subject for challenge in the courts. The Big Food value chain is very carbon intensive, so challenges could arise on various topics. Given the emissions savings that could be achieved from transitioning from single-use to reuse models, failure to act quickly on plastic reduction could well be one of these.

Risk driver

A healthy climate for carbon claims

As argued by the authors of an article in the Oxford Journal of Legal Studies, we are entering a "second wave" of climate litigation, one in which claims against private companies are more common and more likely to succeed.

The article identifies several trends behind this. One of these is the availability of scientific evidence "that can strengthen assertions of a causal link between climate change-related harm and a company's behaviour".

Source: Ganguly, G et al, 'If at first you don't succeed: suing corporations for climate change', Oxford Journal of Legal Studies, Vol 38, Issue 4, Winter 2018, pp.841 - 868.

Part III: Buyer be scared – plastics as a toxic^{ix}

Risks relating to health concerns linked to plastic packaging

Plastic packaging is a “known, and avoidable, source of human exposure to synthetic, hazardous and untested chemicals”.⁸⁸ Of the 10,500 chemical substances that can be found in plastics, almost a quarter are potentially of concern for human health.”⁸⁹

These hazardous substances include additives that are used to give plastics certain characteristics, as well as so-called ‘non-intentionally added substances’ that end up in packaging materials due to impurities in raw materials, chemical reactions and degradations of chemicals caused by exposure to air or sunlight.⁹⁰

25%



of the 10,500 chemical substances found in plastics are potentially harmful to human health

“Everywhere” and “forever” chemicals

Recently, plastics have taken centre stage in mounting concern around the effects of exposure to ‘endocrine disrupting chemicals’ or EDCs, chemicals that mimic or block hormonal messages, upsetting the many critical hormone-driven processes in the body.⁹¹ Plastics are “a pervasive and widespread source of exposure” to EDCs.⁹² In relation to plastic packaging, phthalates are of particular concern. These suspected EDCs are added to plastics to make it softer and more flexible. Phthalates are so ubiquitous in modern lifestyles that they have been nicknamed “the everywhere chemicals”.

EDCs have been linked to serious health conditions, such as diabetes, obesity and certain types of cancer.⁹³ Foetal exposure to EDCs has also been linked with autism spectrum disorder and attention deficit hyperactivity disorder.⁹⁴ EDCs can also lead to compromised reproductive health – a subject which attracted widespread media coverage earlier this year following the publication of ‘Count Down’, a book by world expert Shanna Swan, that charts the astonishing decline in human fertility since the 1970s.⁹⁵

“The problem of plastics **is** the problem of chemical safety”.

Health and Environment Alliance, ‘Turning the plastic tide: the chemicals in plastic that put our health at risk’, September 2020

A recent study also found per- and polyfluoroalkyl substances or PFAS in plastic containers and bottles.⁹⁶ They do not break down in the environment, and so have been nicknamed “forever chemicals”. They also accumulate in the human body. As well as being known EDCs, studies have shown that they interfere with the reproductive system and foetal development, and promote the development of certain cancers.⁹⁷

^{ix} We have highlighted human exposure to toxicity in plastic packaging as the topic of most relevance to Big Food from a short-to-medium term risk perspective. In reality, the concerns relating to human health and plastics are broader than this: the entire plastics lifecycle gives rise to health problems. More information on this can be found in CIEL’s 2019, ‘Plastic & Health: the hidden costs of a plastic planet’. Moreover, this environmental contamination also affects wildlife. Examples of these effects are described in Gallo et al, ‘Marine litter plastics and microplastics and their toxic chemicals components: the need for urgent preventive measures’, Environmental Sciences Europe, 20, 13, 2018

PFAS can contaminate plastic packaging through a number of routes. A peer-reviewed paper on the subject is expected in the next few months that reportedly presents evidence of PFAS in grocery items.⁹⁸

The concerns about the impact that plastic packaging could have on human health do not end there. Substances included in the EU's list of most toxic hazardous chemicals can also be present in plastic food packaging, including carcinogenic and mutagenic (causing gene mutations) chemicals.

Microplastics

In the last few years, attention has also turned to microplastics, which we now know are entering the human body through various routes, including inhalation from the air and ingestion from food and water.⁹⁹ Studies have also indicated we are likely to be ingesting microplastics directly from food and drink packaging.¹⁰⁰ The impacts of ingestion of microplastics on human health are not yet known. But as Peter Myers, founder and chief scientist of non-profit Environmental Health Sciences and adjunct professor of chemistry at Carnegie Mellon University is quoted as saying in a Washington Post article on the subject, "there cannot be no effect" – at the very least, ingesting microplastics is likely to increase our exposure to hazardous chemicals in plastics, such as those referred to above.¹⁰¹

All this has serious implications for Big Food. As we explore below, consumers are increasingly aware of chemical safety issues linked with plastics and food packaging. The EU has plans for some drastic changes to chemicals legislation that will have knock-on effects for intense packaging users like Big Food. Finally, as scientific evidence of the most significant adverse health effects connected to substances in plastic packaging accumulate, the risk of legal action is growing, with warning signs playing out in recent US class actions on PFAS, and insurers steeling themselves for EDC-related claims.

Risk driver

The power of social media

A TikTok star examined canned tuna under a microscope using the social media platform, highlighting to viewers a number of objects he believes to be microplastic.

The video was viewed almost one million times and gained nearly 5,000 comments, "with many people aghast at the concept of microplastics".

Source: Yahoo News Australia, '[Disturbing discovery inside popular supermarket product](#)', 25 March 2021

Reputational risk

These issues are undeniably entering the public consciousness. In the last year, there has been a proliferation of headlines in major newspapers reporting on the links between plastics and serious health concerns.¹⁰²

A survey conducted by the European Commission in 2020 found that 74% of citizens in the EU are worried about the impact of plastic products on their health.¹⁰³ The European Bureau of Consumer Unions has reported "significant concern about exposure to chemicals", with data showing that "fears over hazards in consumer products" have risen "dramatically" in recent years.¹⁰⁴

74%

of citizens in the EU are worried about the impact of plastic products on their health

Of all the companies in the plastics supply chain with a role to play in this “toxic apocalypse”,¹⁰⁵ Big Food is the most at risk from the public backlash over plastic packaging and toxics.

History demonstrates that consumer concern can persuade Big Food to act even before regulation forces them to. For example, in 2008, retailers in the US began removing products containing bisphenol A (known as BPA) from their shelves in

response to widespread concern about safety prior to any declaration on the subject matter being made by the US Food and Drug Administration. In the late nineties and early noughties, “resistance” from British supermarket customers provoked retailers into ceasing the sale of genetically modified products before scientists had reached any conclusion on their harmfulness to the environment and human health, and before regulators had acted to restrict them.¹⁰⁶ The latter example demonstrates that the mere perception of risk can be sufficient to trigger widespread public concern and generate reputational risk.

As Professor Derek Burke observed in an article exploring the public reaction to genetically modified food in the UK:

“[p]eople are generally more worried if they perceive a risk to be involuntary, for example, exposure to pollution rather than voluntary, such as smoking... Risks are also seen as more serious if they are inequitably distributed, inescapable by taking personal precautions, if they arise from an unfamiliar or novel source or if they cause hidden and irreversible damage...”

Burke D, 'GM food and crops: what went wrong in the UK?' EMBO Reports. 5(5), 2004, pp. 432 - 436

According to this analysis, it is hardly surprising that consumer concern regarding toxics and plastics has mounted so quickly.

Big Food should expect to bear the brunt of mounting consumer pressure on this subject. These are, after all, the companies in which there is the highest expectation of safety. Even isolated food safety incidents can have “severe effects on the food industry”¹⁰⁷ and significantly undermine trust in brands, with the European horsemeat scandal of 2013 providing a prime example.

Regulatory risk

Flaws in chemicals regulatory approaches are at least partially responsible for the toxic menaces hiding in everyday products. As the Royal Society of Chemistry has said:

“For the world to solve the major environmental and health challenges we face, there must be a sustainable chemicals revolution”.

<https://www.rsc.org/new-perspectives/sustainability/sustainable-chemicals-strategy/>

In 2020, the European Commission took up this baton, setting out commitments in its Chemicals Strategy for Sustainability¹⁰⁸ (the CSS) that were described by the Health and Environmental Alliance as “transformative”.¹⁰⁹ The CSS contains commitments to considerably accelerate the identification and control of hazardous substances in the EU in ways that NGOs and activists have been demanding for years. This includes banning hazardous substances by group, rather than one by one, improving processes for identifying substances as EDCs, as well as eliminating EDCs from food packaging as a matter of principle. Industry will be required to provide more information to the authorities on the safety of chemicals they use, which will also act as a gateway to further restrictions.

Industry has balked at the level of ambition in the CSS, with lobbyists directing furious efforts at the Commission to scale back its proposals.^x But the trend for more rigorous regulation of chemicals in consumer products is gaining momentum and the revolutionary proposals in the CSS may only be the start. For example, several Member States have collaborated to collate and publish information about the substances that their national chemicals and environmental agencies consider to have endocrine disrupting properties, beyond those being evaluated at EU-level. Initiatives such as these could well push the EU to react even more quickly on EDCs.¹¹⁰

Risk driver

The ‘Brussels Effect’

The largest FMCGs and many of the largest grocery retail groups serve international markets. But this does not mean that the impact of EU regulation is limited to product sales in the Member States.

Part of the success of Big Food systems is owed to economies of scale and highly streamlined production processes. Changing packaging to comply with regulations for EU markets only is not necessarily cost-effective, which can mean that such companies choose to apply EU standards (which tend to be the strictest) everywhere. This has already been observed in the realm of food safety: “The EU’s stringent food safety standards have transformed multinational companies’ worldwide business practices in many instances, often because these companies want to avoid the legal risks and economic costs of dividing the production destined at different export markets.”

Source: Bradford A, *The Brussel’s Effect: How the European Union Rules the World*, Oxford University Press (2020), p.187

So where does this rapidly changing regulatory environment leave Big Food?

In the short to medium term, some of the current formulations of single-use plastic packaging will no longer be permitted and the option to simply “drop in” alternative substances will not be available. In some cases, this may mean that the packaging in question loses the qualities that made it desirable for use as packaging in the first place. In others, it may no longer be economically viable to continue using the same material. Whether or not costs are absorbed by packaging producers, or are passed down the value chain will depend on many factors. Whichever actor bears the direct costs, this disruption will affect the carefully honed packaging processes of Big Food. Finally, where regulators are taking action, (particularly in a way that results in some noticeable changes to products on the shelves) this may well serve to underline to consumers that packaging could represent a hazard to health.

^x See, for example, Cefic’s statement declaring that “market incentives” are preferable to “wider bans and restrictions” and emphasising the role of the chemicals industry in “supporting the transition towards a climate-neutral and circular economy”: <https://cefic.org/media-corner/newsroom/joint-statement-on-the-1st-meeting-of-the-high-level-roundtable-on-the-implementation-of-the-chemicals-strategy-for-sustainability/>

Liability risk

Revelations about the harmful effects that plastics may have on health have already led to comparisons between plastics and asbestos¹¹¹ – widespread use of which up until the 1980s resulted in such a proliferation of lawsuits that law textbooks often contain a separate chapter on the subject matter.

There are several potential avenues through which litigation could develop, including claims relating to labelling, marketing and transparency, and regulatory actions. All of the former can result in negative publicity and raise further awareness of health hazards associated with plastics. The reaction of industry lobbyists to the recent classification by the Canadian Federal Government of plastics as toxic for the purposes of its environmental protection law demonstrates how undesirable this association is for plastic-producing and using companies.^{xi} Big Food companies are also exposed to the reputational risk of being publicly linked to cases targeted at other actors in their supply chains, such as chemicals manufacturers.

Behind the scenes, there are indications that insurers are steeling themselves for EDC-related claims. Mutual health insurance funds are mobilising to improve awareness of EDCs among consumers and provide information regarding sources of exposure.¹¹² One mutual fund estimates that the health costs caused by exposure to EDCs amount to at least €163 billion per year in Europe alone.¹¹³ Reinsurer Hannover Re has also identified EDCs as a potential source of “serial and cumulative losses”, ring-fencing the highest risk of claims arising from links between “low-level endocrine disruptor exposure and bodily injury”.¹¹⁴

€163bn

health cost per year in Europe caused by exposure to EDCs

Big Food would also be well-advised to keep a close eye on litigation relating to PFAS in the US, as this provides a comparable example of how liability for hazardous chemicals used in plastic packaging could develop in time. PFAS have been the subject of numerous lawsuits against chemicals manufacturers in the United States. One such case, a personal injury class action against US chemicals giant DuPont, was

the subject of *Dark Waters*, a film starring Mark Ruffalo released in 2019, providing an example of how well-publicised litigation can cause significant reputational harm. Legal commentators are already predicting that PFAS claims will shift downstream in the supply chain to the companies that use PFAS in their operations or products. They are also predicting that litigation on phthalates, the so-called “Everywhere Chemical” so widely used in plastic packaging, could give to similar litigation in future.¹¹⁵

“As demonstrated in the case of PFAS, growing public concerns about chemical exposure can result in the widespread adoption of disparate regulatory standards and create unexpected litigation risks”.

Pillsbury Winthrop Shaw Pittman LLP, ‘The “Everywhere Chemical” – might phthalates become the next PFAS?’, June 16 2021

^{xi} “Canada’s decision this week to legally label plastics products as “toxic” could cause a “chill in investment in the country’s chemicals-plastics sector”: ICIS, ‘Canada’s CIAC fears investor chill as government labels plastics “toxic”’, 14 May 2021

Conclusion

The impact of plastic waste in the environment consistently tops the list of consumer concerns, and shows no signs of fading from view.

A wave of EU legislation on waste – including the first-of-a-kind Single-Use Plastics Directive – has already come into force, with further plans to up ambition already on the table. Increasing public awareness on the waste trade, along with more and more importing nations closing their borders, is set to add greater incentive for policymakers to cut off plastic waste at the source.

Added to this, the whole plastic value chain is coming under scrutiny for its role in the climate crisis. Plastic production is seen as the next frontier of fossil fuel infrastructure by activists and policymakers. Plus, the emissions savings that would result from implementing circular business models means that transitioning away from single-use will be essential in order for the EU to meet its climate targets.

“The time for preventing plastic pollution is long past – the time for changing the future of plastics in our world, however, is now”.

Smith J, 'A devil's bargain', Science, 2 July 2020, Vol 373, Issue 6550, pp. 34 - 35

Finally, increasing awareness of the health concerns linked with plastics is opening up a whole new world of trouble for Big Food. Consumers are likely to seek to avoid packaging, not just for environmental reasons, but also motivated by protecting their own health. Tightening regulations on chemical safety will generate disruptions to carefully-honed packaging supply chains and related processes in the EU. **For Big Food, the only real way to mitigate these risks is to reduce the tide of single-use plastics at source.**

In Section 3, we set out our recommendations for investors and asset managers. This includes a reminder of legal obligations relevant to managing and disclosing plastic-related risk, an explanation of the 'false' or 'stop-gap' solutions that the investment community must have on their radar, as well as concrete recommendations for developing and implementing a plastics policy.

3

**Recommendations
for investors and
asset managers**

Legal obligations on companies and the investor community

Companies

Public entities incorporated in Europe are subject to disclosure obligations relating to material environmental social and governance matters pursuant to the Non-Financial Reporting Directive.^{xii} These are matters in which the company either has a **material impact on the environment**, or in relation to which it faces **material financial risks to its business**.¹¹⁶

In light of the scale of the problem posed by plastics, the centre-stage role Big Food plays in it, and the snowballing plastic-related risks identified in this report, we will argue that for Big Food companies, single-use plastics is likely to be a topic that is material from both perspectives.

Where this is the case, in relation to their use of plastics, companies should be providing information to shareholders and other stakeholders on:^{xiii}

- their policies,
- the outcome of those policies,
- the risks they face and how they manage them, and
- relevant non-financial key performance indicators.

Directors of such companies should also consider their duties and potential liabilities as regards management of plastic-related risk. In broad terms, corporate governance provisions in EU Member States and under UK law require directors to exercise care, skill, prudence or diligence (the precise requirements vary across jurisdictions) in carrying out their management functions, as well as owing duties to act in the best interests of the companies they manage.^{xiv}

Where plastic-related risk is material, a failure to disclose relevant information may well also indicate a broader failure by directors to exercise their duties to the standard set by law, as well as amounting to a breach of laws on corporate reporting.

Investors and asset managers

Investors, asset managers and financial advisors should also consider their own legal obligations when it comes to managing and disclosing plastic-related impacts and risks. These include, for example, complying with fiduciary duties owed to clients (e.g. the duty to manage risk appropriately), as well as legal obligations to incorporate ESG factors into investment decisions.

Some asset management and investment firms fall within the scope of the Non-Financial Reporting Directive – and should also consider whether plastic-related impacts and risks linked to their activities are material for disclosure purposes.

Moreover, the Sustainable Finance Disclosure Regulation,^{xv} adopted as part of the EU's Sustainable Finance Action Plan, requires asset management, investment and financial advisory firms within scope to report publicly on (inter alia) **how they**

xii Directive 2014/95/EU of the European Parliament and of the Council amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups

xiii Summarised from Article 1 of Directive 2014/95 of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34 as regards disclosure of non-financial and diversity information by certain large undertakings and groups. These provisions are reflected in UK law too, in particular, s. 414CA of the Companies Act 2006.

xiv For example, under French law, the duty is of "prudence and diligence"; under German law, the director must exercise the standard of care of "a diligent and prudent businessman", under Belgian law, directors must be diligent in the performance of their duties etc.

xv Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector

integrate sustainability considerations into their investment decisions/advice and the **principal adverse impacts their investments have on sustainability**.^{xvi} Failures by investees to disclose material information on single-use plastics will not absolve investors and asset managements of the relevant legal obligations.

In order to ensure compliance with the legal obligations set out above, we therefore recommend that investors and asset managers with holdings in the packaged food and drink sectors:

- integrate an understanding of the plastic-related risks investees are exposed to their investment decisions and advice; and
- report the adverse plastic-related impacts investments in these companies have on the environment in compliance with the law.

In order to achieve this, investors and asset managers also need to be able to differentiate between policies on single-use plastics that show ambition and genuine potential to mitigate a company's impacts and risks, and those that do not. Below, we give an overview of the initiatives companies should be focusing on, and those that are "false solutions" to the plastics crisis.

Direction of travel: destination plastic-free

To date, many companies in the sector have treated the plastics crisis as a PR problem, rather than a serious and escalating environmental and health issue. Flashy-sounding pilot projects and grandstanding press releases on initiatives limited to a single product, brand or region and investment in the false solutions outlined below are unlikely to achieve a genuine reduction in the impacts of single-use plastics. They are also unlikely to mean that companies are effectively mitigating their exposure to plastic-related risk.

In reality, shifting away from 'take-make-waste' models of consumption is the only way to address the multiple environmental and health problems caused by single-use plastic products. **This means that companies should be working to reduce their dependence on single-use plastics by eliminating unnecessary packaging and investing in reuse and refill based alternative delivery systems.** And if they do not, they risk being outmanoeuvred by innovative companies. As Wood Mackenzie notes, "momentum behind reuse is growing".¹³⁰ According to Insider magazine, sales for companies focused on low waste and eliminating unnecessary plastic use boomed in 2021.¹³¹

Yet at present, many of the activities presented by companies as "solutions" to the problem are at best limited in their potential to make a dent in the problem, and at worst, actively derailing sustained efforts at reducing single-use plastic packaging. **To assist investors in critically assessing the robustness of plastic policies, we have set out a brief guide to false solutions below, along with a short explanation of their limitations.**

"A reduction of plastic production – through elimination, the expansion of consumer reuse options, or new delivery models – is the most attractive solution from environmental, economic, and social perspectives".

The Pew Charitable Trusts, 'Breaking the plastic wave: a comprehensive assessment of pathways towards stopping ocean plastic pollution', p.9.

^{xvi} Article 3 requires firms that manufacture financial products and financial advisors to publish policies on how they integrate sustainability risks into their investment decisions/advice. Articles 3 and 6 require firms and financial advisors to publish a statement on their due diligence policies where they consider the principle adverse impacts of investment decisions on sustainability factors (for some large companies, as of June 2021, this is obligatory). If a financial product promotes environmental or social characteristics, or has sustainable investment as an objective, firms are also required to publish and maintain information on these characteristics/relevant methodologies etc. (Articles 8, 9, 10 and 11)

A brief guide to false solutions to the plastics crisis

Type of initiative	Key limitations
<p>"Plastic offsetting", "plastic credits" and claims of "plastic neutrality"</p>	<p>Plastic credits initiatives are similar to carbon offsetting. Companies can purchase credits representing tonnes of plastic waste removed from the environment and in addition or separately, purchase credits representing tonnes of plastic waste subsequently recycled. Often, the waste is collected by informal waste workers. Collected plastics may be incinerated – a process that releases GHG emissions and other toxic pollutants (see more below). Credits representing waste “recycled” include those processed using chemical recycling – the limitations of which are described below.</p>
<p>Beach clean-ups</p>	<p>Although beach clean-ups can be a powerful educational tool, they do nothing to prevent plastic waste from entering the environment in the first place, and also convey a message that individual action – rather than structural changes – is sufficient to address the plastics crisis. They are mainly cosmetic: most ocean plastic is now too small or too remote to be cleaned-up.</p>
<p>Material substitution – bio-plastics, compostable plastics and biodegradable plastics</p>	<p>“Bioplastics” – plastic made from plant oil rather than fossil fuel – is generally no less harmful to the environment as a waste product than the original, and cultivating plants on a mass-scale for these purposes gives rise to other problems associated with monoculture. “Biodegradable” and “compostable” plastics are also no quick fix. Many of these materials will only break down in very specific conditions, which many waste management systems cannot provide, and are unlikely to occur in the natural environment. They are often physically indistinguishable from oil-and gas-based plastics, and so can disrupt mechanical recycling systems.</p>
<p>“Waste to energy” or “waste recovery”</p>	<p>These terms refer to the incineration of plastic waste to produce energy. This is just another form of burning fossil fuels. As well as producing GHG emissions, they produce toxic ash and air and water pollution.</p>
<p>“Advanced” or “chemical” recycling</p>	<p>The term “chemical recycling” refers to the breaking down of plastic waste polymers and converting them to new plastic or using the product as fuel. It has high energy requirements and is emissions-intensive. For manufacturing new plastic, it has not yet been proven at scale. There are also uncertainties regarding its safety: processes result in harmful toxic emissions and solid waste.</p>

Sources: Adapted from BFFP, 'Missing the Mark: Unveiling corporate false solutions to the plastic pollution crisis', June 2021 and Changing Markets Foundation, 'Talking Trash: the corporate playbook of false solutions to the plastics crisis', September 2020.

The role of recycling

“The plastic waste problem has grown too large for us to simply recycle our way out of it”.

World Economic Forum, 'Future of Reusable Consumption Models: Insight Report', July 2021

Many companies have also made commitments regarding improving the recyclability of packaging and incorporating increased recycled content. Improving product recyclability by design and incorporating increased post-consumer recycled content is – broadly speaking – to be encouraged. However, it is subject to some limitations.

- Just because a product is recyclable in theory, it does not mean it is recycled in practice. The fate of recyclable plastics is determined by the availability of recycling infrastructure and market conditions – not generally taken into account by companies labelling packaging as “recyclable”, with potentially misleading results for consumers.
- Plastics cannot be infinitely recycled. The material loses its quality over time, often meaning that recycled plastics have limited applications. Recycling plastics into fabrics or other products that are not themselves recyclable is ‘downcycling’, as the recycled product cannot be recycled itself, and so is destined for landfill or incineration.
- The toxicity of recycled plastics is a real area of concern, particularly for food and drink packaging applications. The presence and quantities of hazardous additives and non-intentionally added substances is simply unknown when mixed plastic of undetermined source is recycled.

Targets for incorporating recycled content and improving recyclability should be included **in addition** to absolute reduction targets, and roll-out of reuse and refill systems.

Recommendations for investors and asset managers

1. Policies

a) Investors and asset managers should:

- collaborate with all relevant stakeholders to develop a robust methodology for calculating the plastic footprint of their investments across the whole plastics value chain.
- develop, implement and publish investment policies for companies operating across the whole plastics value chain.

b) In particular, for FMCGs and grocery retailers, investors and asset managers should seek commitments from companies to:

- calculate and disclose their complete plastic footprint on an annual basis. This should:
 - include both waste from the company’s own operations and waste from products and packaging sold,
 - be expressed in units and by weight,
 - cover all geographies in which the company has operations,
 - for grocery retailers, cover both branded and own-brand goods, and
 - be independently verified.

Where companies face short-term challenges in collecting and verifying such data, whilst they work on rectifying these deficiencies, they should provide best estimates using transparent assumptions and standardised metrics.

(ii) formulate strategies to eliminate single-use plastic packaging.

These should:

- prioritise a shift to reuse delivery models over both 'light-weighting'^{xvii} and replacing plastics with alternative single-use materials,^{xviii} and
- contain ambitious, specific,^{xix} measurable and time-bound targets for eliminating single-use plastics.

(iii) support policy measures that address the plastic pollution crisis at source and ensure that any engagement with policy makers conducted on their behalf is aligned with this principle.

2. Due diligence and engagement

a) Investors and asset managers should:

- (i) review current and potential investee companies to identify those that do not meet the criteria in their policies, including those set out above, and
- (ii) engage with companies and request that they provide regular performance indicators demonstrating progress against targets and milestones set out in their strategies.

b) In the event that investees fail to meet the criteria requested or meet their commitments on single-use plastics, investors and asset managers will need to manage their own resulting reputational and investment risk exposure and should escalate their engagement with investees using stewardship tools such as:

- (i) questions at annual general meetings,
- (ii) filing / voting in favour of plastics-related shareholder resolutions,
- (iii) voting against responsible directors when they are due for re-election.

Investor and asset manager engagement with investee companies must be **credible and robust** in order to effectively manage their own reputational and investment risk – and avoid becoming part of the problem of ineffective mitigation of plastic-related risk.

xvii 'Light-weighting' refers to the practice of replacing packaging material with lighter alternatives. Whilst this might decrease the amount of plastic by weight, it can make packaging more difficult to recycle and does not nothing to address the dependence on single-use plastic.

xviii Types of materials often used as substitutes for plastics such as paper and wood also have negative impacts on the environment.

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ClientEarth is a registered charity that uses the power of the law to protect people and the planet.

ClientEarth is funded by the generous support of philanthropic foundations, institutional donors and engaged individuals.

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