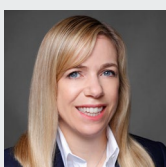
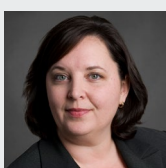




ESG Integration in Action—Plastics



Maria-Elena Drew
Director of Research,
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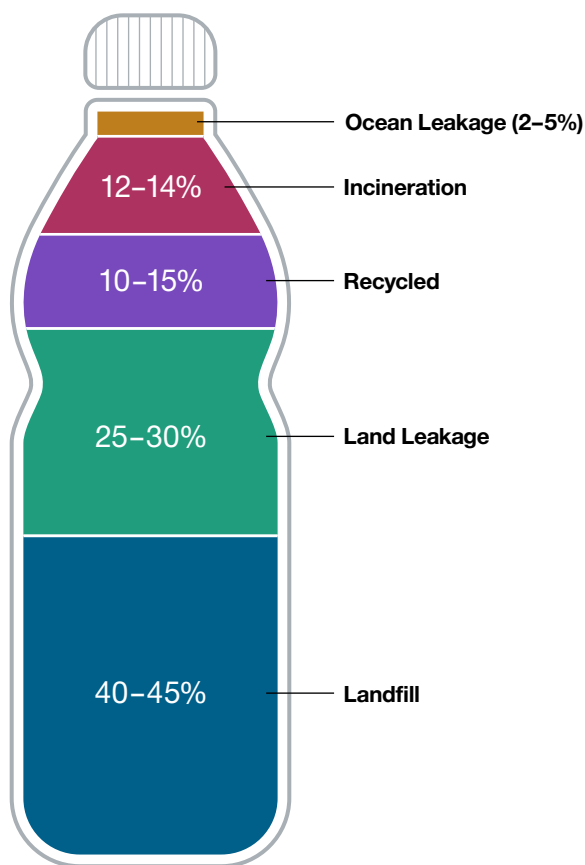
Donna Anderson
Head of Corporate
Governance

Plastics

Plastics can play a positive role in some sustainability issues, including reducing food waste, reducing product weight to enable more efficient transportation, improved building materials, or better hygiene. However, their sheer volume of production and non-degradable nature means they have come to epitomize the problems of the end-to-end or linear economy.

When thinking about the three principles of the circular economy—eliminating waste and pollution, circulating products and materials, and regenerating nature—many tend to associate plastics with the first two. They view the plastics problem from the perspective of recycling and product life-cycle design. Yet, plastics fundamentally violate the third principle as they introduce a non-degrading substance into the natural world.

Global Plastics Ultimate Disposal*



Less than 2% of plastics currently come from bio-based materials. The remainder are derived from fossil fuels, which are broken down with energy-intensive processes and then mixed with chemicals to create different types of plastics. The resulting synthetic product is not found anywhere in nature and does not easily decompose. Plastics can break into smaller parts but cannot break apart. The large-scale production and poor practices around disposal have made plastic a ubiquitous substance in nature—so much so that plastics are a marker of the current geological era¹ and have given rise to a new microbial habitat known as the plastisphere.²

After climate change, plastic pollution may be the next biggest environmental crisis. Due to the multiple and cascading risks posed by plastic pollution, it is seen as a multiplier that can act in tandem with other stressors like climate change and overexploitation of marine resources to cause far greater damage than if each occurred in isolation.³

The Ellen MacArthur Foundation estimates that 95% of plastic packaging material is lost to the economy after its first use. As such, plastic packaging has become an enemy of the circular economy and has prominently entered the crosshairs of consumers and regulators. Over one-third of global plastic use is in the packaging sector. As regulators address the plastics issue and consumers become more aware of the sustainability pressures plastic packaging presents, we expect the single-use plastics space to be radically reshaped in the coming decade as companies use alternative materials (paper, aluminum, etc.), innovate better plastics (bioplastics, etc.), and use less packaging material altogether.

International collaboration plays a crucial role in the fight against plastic pollution. That's why the outcome of a recent United Nations Environment Assembly is a positive step forward toward tackling the problem. In March 2022, 175 countries agreed to draw up a global and legally binding treaty to end plastic pollution—with a view to finalizing the treaty by the end of 2024.

*Source: The New Plastics Economy, Ellen MacArthur Foundation, 2018. Most recent data available.

¹ Zalasiewicz, et al. (2016)

² Amaral-Zettler, et al. (2020)

³ United Nations Environment Programme (2021). From Pollution to Solution: A global assessment of marine litter and plastic pollution.

Plastics in RIIM

One of our internally developed databases feeding our Responsible Investing Indicator Model (RIIM) analysis is devoted to packaging statistics and targets for consumer products companies. The database has a strong focus on household and personal care (HPC) companies, where consumer preferences have been most pronounced. Over half of the HPC companies in the MSCI All Country World Index specifically mentioned that they were motivated to improve the sustainable profile of their products due to increased consumer interest in the environmental footprint of their purchases. Many see sustainable packaging as a way to meet consumer expectations.

We expect companies that disclose targets and progress related to sustainable packaging will likely

see greater growth and returns in the long run as consumers increasingly consider the environmental impact of packaging in purchasing decisions. These companies will also be less financially impacted by regulation and taxation that seek to restrict plastic use and increase recyclability.

As an input into RIIM, data related to packaging targets are readily available to our equity and credit analysts covering the consumer products industries. Importantly, we recognize that the change needed to address the environmental crisis created by plastic packaging is not as simple as switching materials, nor can the long-term solution sit squarely with recycling. Understanding a company's long-term packaging plans is an important part of our analysis.

Plastics-Related Factors Featured in RIIM

Primary plastics-related data inputs
(non-exhaustive list)

RAW MATERIALS

Packaging performance
Packaging targets
Raw material from sustainable sources



ENVIRONMENTAL PRODUCT SUSTAINABILITY

Green revenue (nurturing circular economies)

ESG ACCOUNTABILITY

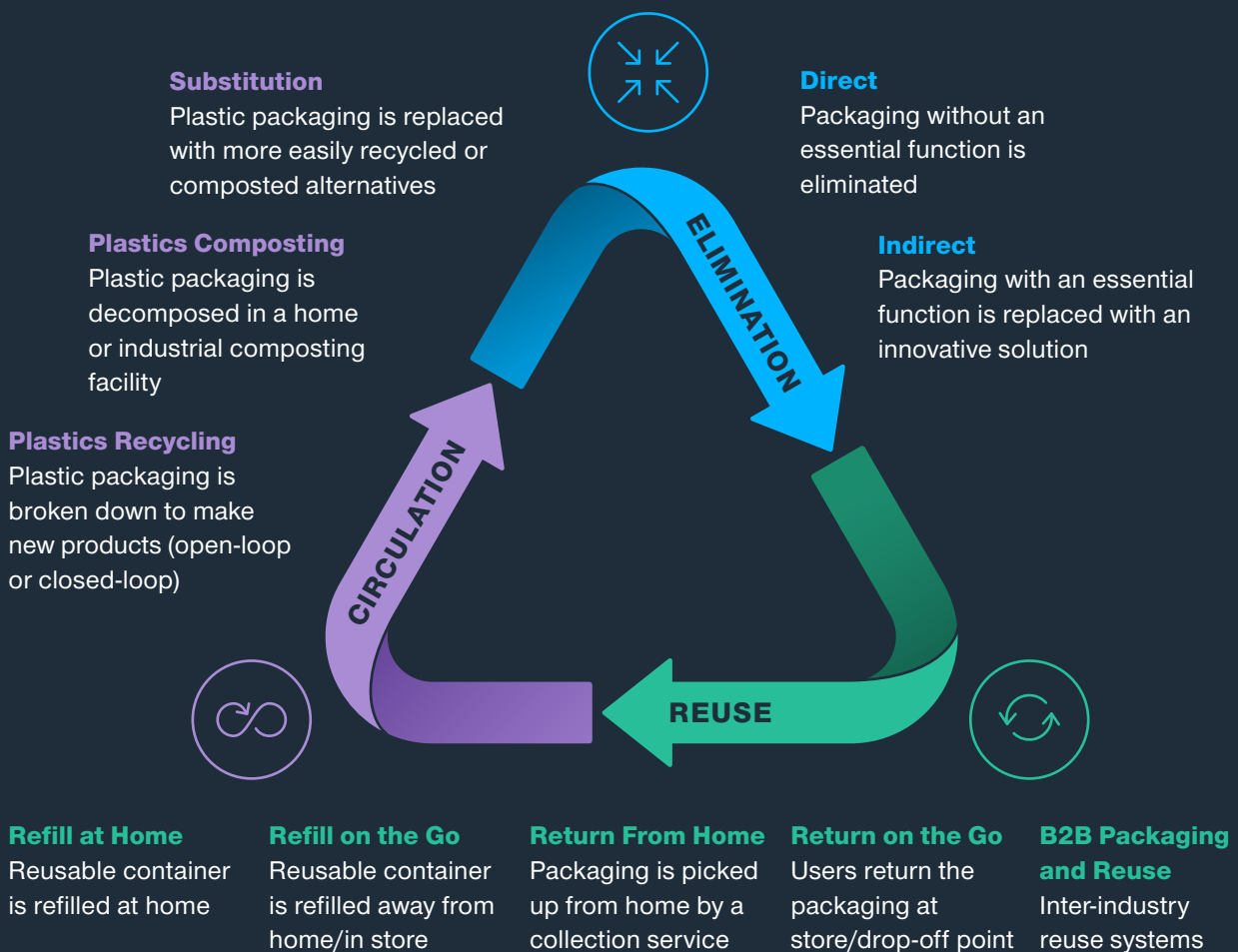
Reporting standards
Performance targets
Executive committee accountability
Board accountability



Many leading companies within the HPC industry expect to complete full overhauls of their packaging between 2025 and 2030. Businesses have responded to changing consumer preferences and expectations by switching to alternative materials such as aluminum or paper. Meanwhile, others have adopted new policies, like eliminating plastic bags entirely, as they simultaneously make other changes to their products or supply chains. More meaningful changes will come with the help of technological breakthroughs and rethinking of the packaging equation (including reusable/refillable solutions).

Plastic-Intensive Industries Are Responding in Different Ways⁴

Within the HPC sector, innovations are broadly focused on three different outcomes



⁴ Source: Original diagram sourced from the Ellen MacArthur Foundation website, September 2021. The diagram is reproduced by T. Rowe Price specifically for inclusion in this article, and its use does not reflect the views of the Ellen MacArthur Foundation, nor does it reflect or imply the foundation's endorsement.

Plastics and Stewardship Activity

In 2021, we engaged with 27 companies on the topic of single-use plastics and packaging. These companies were based in the Americas; Europe, Middle East, and Africa; and Asia Pacific regions, and included sectors such as consumer, industrials, materials, and energy.

Company	Country	Date
Myers Industries	U.S.	January
Hillenbrand	U.S.	February
Alibaba Group	China	March
Avantium	Netherlands	March
Danone	France	March
Indorama Ventures	Thailand	March
Türkiye Sise ve Cam Fabrikalari	Turkey	March
Alicorp	Peru	April
British American Tobacco	UK	April
Budweiser Brewing Co. APAC	Hong Kong	April
Estee Lauder	U.S.	May
Dollar General	U.S.	June
Galaxy Entertainment Group	Hong Kong	June
Braskem	Brazil	July
Britvic	UK	July
Applied Materials	U.S.	October
China Mengniu Dairy Co.	Hong Kong	October
Petco Health & Wellness Co.	U.S.	October
PTT Global Chemical	Thailand	October
Red Robin Gourmet Burgers	U.S.	October
Repsol	Spain	October
Thai Oil	Thailand	October
Westlake	U.S.	October
Fortinet	U.S.	November
Kraft Heinz	U.S.	November
Oxford Nanopore Technologies	UK	November
Carnival Corp.	U.S.	December



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