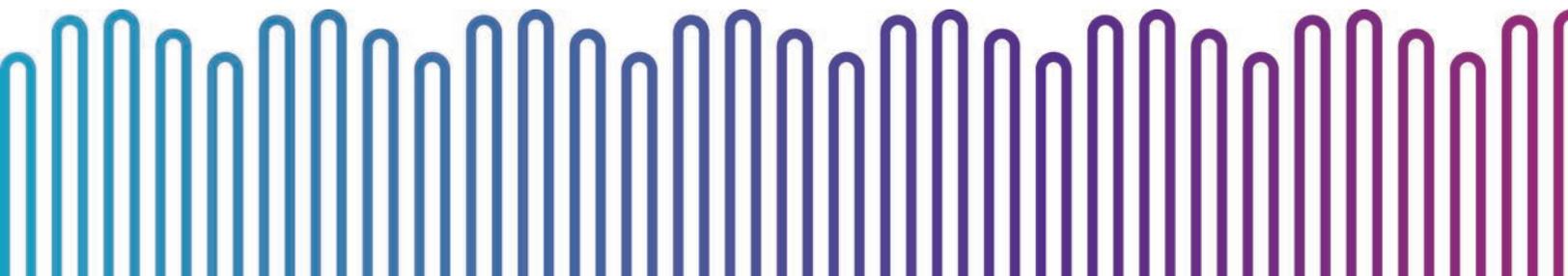




Transparent 2023

Annual *ReSource: Plastic* Progress Report

December 2023





Executive Summary

World Wildlife Fund (WWF) is working toward a vision of No Plastic in Nature by 2030 and is leading the charge to help reimagine how we source, design, dispose of, and reuse the plastic materials communities most depend on.

As part of the effort to bring data and collaboration to the forefront of corporate action, *ReSource: Plastic* publicly reports on the progress of its Member companies year over year. The *Transparent* report series is *ReSource's* annual publication that details and tracks progress on Member activities and harnesses this new data to provide recommendations for action—both internal to company supply chains and across wider multi-stakeholder efforts.

TRANSPARENT 2023

Transparent 2023 is the fourth installment of *ReSource: Plastic's* reporting series. This report highlights progress made relating to *ReSource* Members' global plastic footprints in 2022, including their use of plastic by polymer type and form, their use of recycled content and sustainably sourced biobased content, and the likely waste management pathways for their plastic portfolios. This year also marks the first time that *ReSource* has specifically collected data on reuse activities from Members.

INSIGHTS

Transparent 2023 expands on established opportunities for corporate action using *ReSource's* approach to systems change: eliminating unnecessary plastic, shifting to sustainable inputs for remaining plastic, doubling global recycling and composting, and improving data harmonization. As with previous *Transparent* reports, progress is uneven—yet the focal recommendations identified in years past remain largely relevant today. *ReSource* will continue to utilize the recommendations and conclusions in this report to better understand what works in plastic reporting and what does not, as well as the strategies companies should be prioritizing to make an impact. The first step in addressing plastic pollution is understanding the scope, and *ReSource* Members have shown the plastics reporting is possible and critical to change.

ELIMINATING UNNECESSARY PLASTIC

The elimination of unnecessary, single-use plastic is the most important action that companies can take to directly address the plastic pollution crisis through their own portfolios. *ReSource* Members addressed this, in part, through two key strategies:

- **Reducing Problematic and Unnecessary Plastic** – Problematic and unnecessary plastics have been a strategic target for *ReSource* Members to eliminate from their portfolios. In 2018, these products made up 3.2% of Member portfolios, and by 2022 this percentage had been cut by more than half (to 1.2%).

- **Realizing the Potential of Reuse** – WWF sees new business models such as reuse as a key opportunity to reduce overall plastic usage and create circular systems that deliver value to people and reduced impacts to nature. All nine *ReSource* Members are currently exploring reuse models in some capacity. Moving forward, WWF hopes to see a continued shift from piloting reuse systems to deployment, and to see more quantitative information available at both the product category and portfolio levels.

SHIFTING TO SUSTAINABLE INPUTS FOR REMAINING PLASTIC

Increasing the use of recycled content is key to building circular systems for plastic and incentivizing its collection and recycling. Among *ReSource* Members, the use of recycled content has increased from 10.2% of the aggregate portfolio in 2021 to 12.0% in 2022. Collaborative efforts across key markets and on specific materials are beginning to impact availability of recycled material, providing a proof point for this work's value in reaching recycled content goals. Biobased content continues to make up less than one percent of the aggregate portfolio, with its use in individual Members' portfolios ranging from 0.0% to 4.8%.

DOUBLE GLOBAL RECYCLING AND COMPOSTING OF PLASTIC

Eliminating hard-to-recycle polymers and components is important for aligning portfolios with the anticipated future conditions of waste management systems. Although the overall category of problematic plastic use decreased in the 2022 reporting year, the volumes of some hard-to-recycle polymers like PVC and PS did increase between 2021 and 2022 in some Members' portfolios. *ReSource* Members remain engaged in many collective action efforts to scale collection and recycling of plastic, varying with each Member's portfolio—matching the formats, geographies, and polymers that are most relevant to them.

IMPROVE DATA HARMONIZATION

After four years of data collection, *ReSource: Plastic* is uniquely positioned to share key learnings on what does and does not work in plastic footprint reporting. Repetition over several years of reporting

allows us to both recognize patterns in the data and isolate any irregularities, thus improving the analysis quality year over year. It's important to be able to separate changes caused by reporting improvements from true increases in plastic use, and to update baseline information accordingly.

Availability of consistent and reliable waste management data also remains a limitation to drawing insights from reporting results. Without updated and timely waste management data, it is challenging to know whether collective action efforts are having the desired effect. Accurate, harmonized measurement will be critical to understanding, and thus solving, the plastic pollution crisis.

SCALING MEASUREMENT AND DISCLOSURE

An exciting development for harmonized measurement this year is the expansion of CDP's environmental disclosure platform to include plastics, through the Scaling Plastics Disclosure initiative in partnership with The Pew Charitable Trusts, Minderoo Foundation, and the Ellen MacArthur Foundation. WWF has recently joined the Steering Committee of the initiative and will use the experience gained through *ReSource: Plastic* to inform the continued development and expansion of CDP's plastic questionnaire.

Alignment around a standardized corporate reporting process on plastic is something *ReSource* has been working toward since its inception. As additional reporting efforts arise, it is critical that they build upon existing work to create convergence and alignment rather than duplicate efforts and/or proliferate methods that are not compatible.

VOLUNTARY COLLECTIVE ACTION

***ReSource* continues to multiply impact by scaling voluntary collective action through several platforms.** Notably, *ReSource* leverages the *ReSource* Footprint Tracker within the U.S. Plastics Pact and the Canada Plastics Pact to measure year-over-year progress, broadening the Tracker's uptake and increasing harmonization of reporting metrics across North America.



WWF is committed to advancing the uptake of reuse through key collaborations, such as the [Reuse Portal](#), which was publicly launched in May 2023, and the Consumers Beyond Waste Initiative. *ReSource* also continues to hold a thought leadership partnership with the Bioplastic Feedstock Alliance (BFA), which enables *ReSource* to benefit from the BFA's existing work to bring a science-based perspective to the sourcing of biobased plastic and its role in circular systems.

POLICY AND REGULATION

Voluntary corporate action is important and can drive progress in some areas. However, regulation is necessary to address the scale and urgency of the plastic pollution crisis. Advocacy for effective plastic policy is emerging as a key strategy to change incentives and enable transformational change. As momentum builds both at the international and national levels around policy and regulation, there is a clear need for companies to participate in and prepare for changed requirements and incentives.

In 2022, the United Nations voted in favor of a legally binding resolution to address plastic pollution that is being drafted on an accelerated timeline and expected to be enacted in 2025. This global treaty is an unprecedented opportunity for systemic transformation, paving

the way for companies to set the bar of action even higher and mobilizing additional actors through mandatory measures. An “all-in” approach is needed if change is to be enacted this century. All governments, businesses, and individuals must play a critical role in solving the problem, which is why WWF is calling on businesses to join the call for an ambitious treaty, leveraging their immense influence to demonstrate that the corporate world is committed to realizing a world without plastic in nature.

ABOUT RESOURCE: PLASTIC

ReSource: Plastic aims to engage 100+ companies through the ReSource Footprint Tracker by 2030 in the effort to reach the goal of preventing at least 50 million metric tons of plastic waste from entering nature. The ReSource Footprint Tracker serves as a tool for companies wishing to understand not only the amount and the kinds of plastics they are releasing into the market, but also the waste and leakage being generated as a result. Through *ReSource* Members and the *Transparent* report, the ReSource Footprint Tracker provides a common framework for tracking plastic pollution and is laying the groundwork for companies to start reporting on their plastic impact. The goal is to provide the necessary starting point for developing solutions whose impact will reverberate across supply chains and industries.

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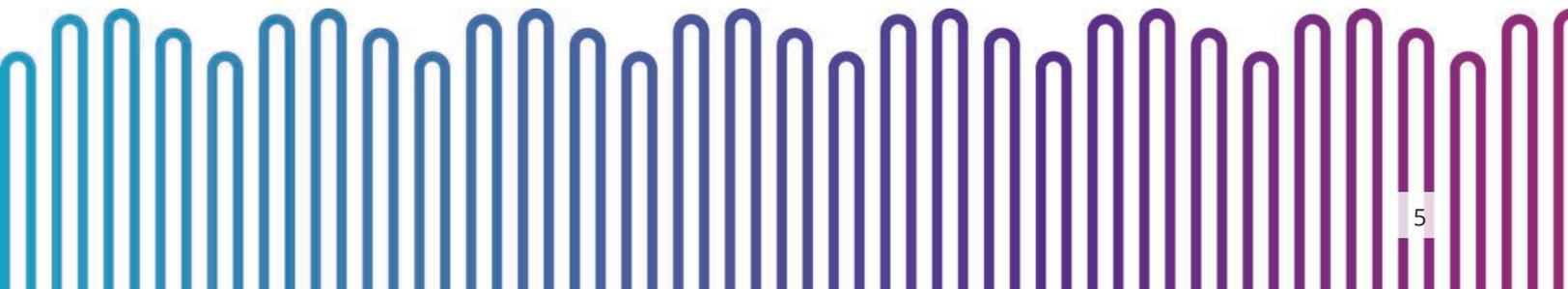
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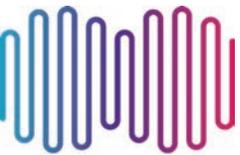
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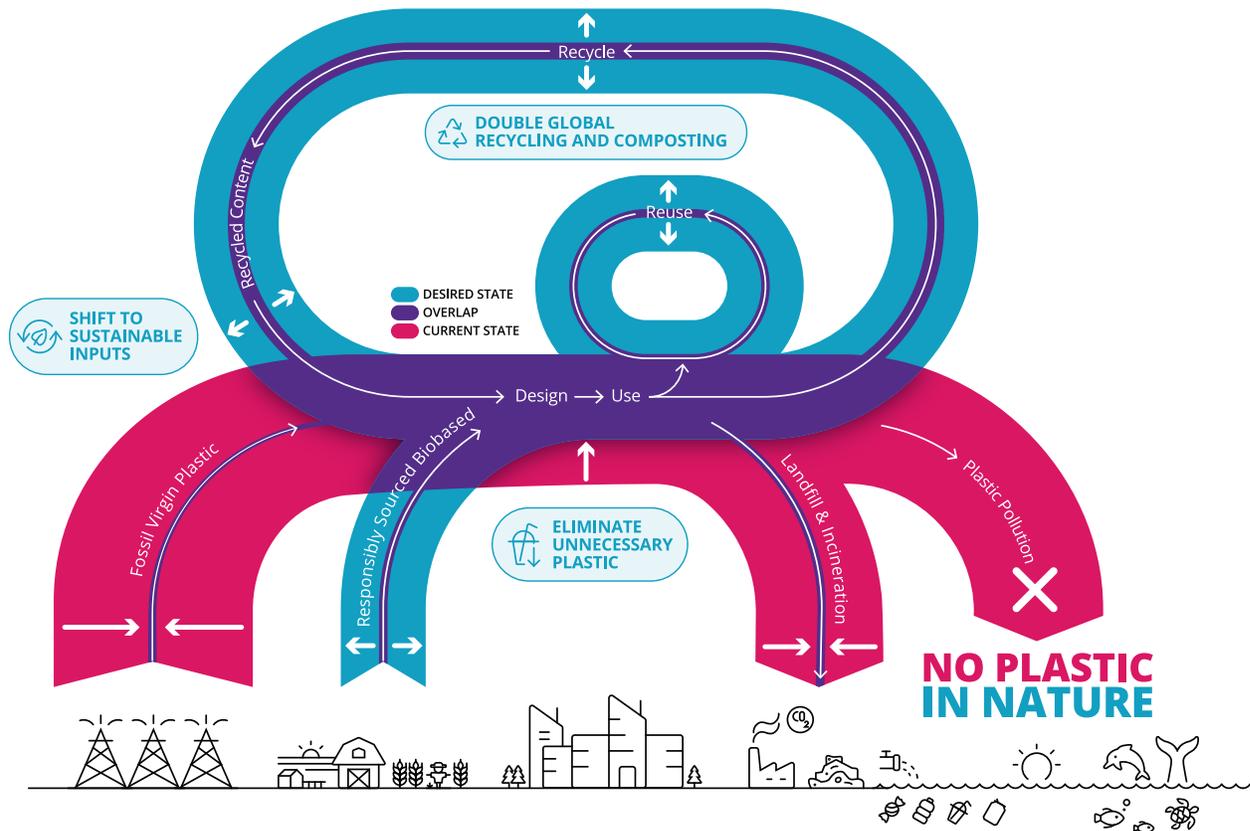
Introduction

Plastic is flowing into nature at an unprecedented rate every day, with a dump truck's worth entering our oceans every minute.¹ In one year alone, this plastic waste adds up to 11 million metric tons, devastating our natural habitats and impacting more than 2,000 species around the world.^{2,3} As this crisis spreads to every corner of the globe, World Wildlife Fund (WWF) is leading the charge to reimagine how we source, design, dispose of, and reuse the plastic materials communities most depend on—because while plastic can help make our hospitals safer, our food last longer, and our packages more efficient to ship, it has no place in nature.

WWF is fighting for a world with no plastic in nature by 2030 through tackling the root cause of the crisis: a broken material system. WWF is approaching systems change through three critical pathways: private sector action, good government policy, and public engagement. As part of this strategy, WWF is partnering with companies around the planet to engage private sector action as a key lever for transformation.

While business has played a significant role in the current plastic crisis, business also plays an indispensable role in mitigating it (see Figure 1). Businesses serve as critical points of influence and catalysts for action among other stakeholders, including governments and the public. They

FIGURE 1. *ReSource: Plastic Theory of Change.*



are also uniquely positioned to reduce waste within their own supply chains through improved sourcing, design, and the implementation of new business models. Especially as the scope and severity of the plastic crisis continues to grow, innovative product delivery systems that minimize waste output while still meeting the demand for convenient, accessible packaging will be invaluable to moving the dial on plastic pollution.

One such solution is effectively scaling reuse systems, which have the potential to transform the way we value the materials we take from the earth by keeping our products in circulation longer. Activating and expanding reuse systems across the wide range of applications where they can be beneficial could help companies not only drastically cut down on the amount of total plastic waste generated but also support business growth: a recent study showed that replacing just 20% of single-use plastic packaging with reusable materials could represent a \$10 billion economic opportunity.⁴

Transparent 2023 represents the first time that WWF has specifically collected data on reuse activities from our *ReSource* Members, all nine of which are exploring reuse in some capacity. While capturing an accurate picture of reuse metrics is still a challenge, our initial data provide the much-needed foundational measurement of ongoing efforts leading companies are investing in reuse.

When *ReSource: Plastic* was launched in 2019, WWF reported that as few as 100 companies have the potential to prevent roughly 50 million metric tons of the world's plastic waste by 2030.⁵ We still have the potential to meet this goal, but businesses need to meet the challenge, committing to pursue plastic waste mitigation activities that both strategically contribute to systems change and maximize their potential for impact. Only then can we turn off the tap of plastic pollution flowing into nature and realize a healthier future for both people and the planet.

About ReSource: Plastic

ReSource: Plastic is WWF's activation hub for companies that are ready to translate plastic commitments to meaningful action but need help building a roadmap to get there. We close that "how" gap through the ReSource Footprint Tracker, an innovative measurement framework that tracks corporate action against *ReSource's* three-pronged approach to leverage business as a catalyst for systems change:

- Eliminating unnecessary plastic through business model innovation, reduction, and substitution
- For plastic that is necessary, shifting from virgin fossil-based plastic sourcing to sustainable inputs, including recycled content, responsibly sourced biobased content,⁶ and advanced materials⁷
- Doubling global collection, recycling, and composting of plastic so that the plastic going into the system is circulated back

By building a large corporate membership and helping these companies take on data-driven strategies, *ReSource* aims to prevent 50 million metric tons of plastic waste by 2030. To get there, *ReSource* is working with its Member companies to do the following:

MEASURE IMPACT of *ReSource* Members' plastic action through the ReSource Footprint Tracker, an innovative measurement framework that calculates aggregate and individual Member global plastic footprints to track progress annually and inform strategy.

MAXIMIZE IMPACT by tracking implementation and progress of activities through the ReSource Footprint Tracker to identify what interventions to reduce waste should be prioritized, scaled, or improved upon.

MULTIPLY IMPACT by catalyzing opportunities for collaboration on large-scale interventions, which is critical to bringing speed and scale to solutions and investments toward systems change.

Members

ReSource was launched in May 2019 with five Principal Members that have demonstrated ambition and sector leadership on plastic waste: Keurig Dr Pepper, McDonald's Corporation, Procter & Gamble, Starbucks, and The Coca-Cola Company. Since then, we have welcomed three additional Members: Amcor, Colgate-Palmolive, and Kimberly-Clark. CVS Health has also joined as Principal Retail Member. As Members of *ReSource*, the companies are committed to tracking and annual reporting on their plastic footprint, taking recommended actions to advance *ReSource's* goals, and, importantly, pursuing collaborative efforts with other companies and stakeholders to scale critical interventions to address plastic waste.



Supporting Partners and Collaborations

THOUGHT PARTNERS

The Ellen MacArthur Foundation and Ocean Conservancy are leaders in the global effort to stop plastic pollution. As our thought partners, they provide continued guidance that helps inform strategy and strengthen the conservation-driven objectives of *ReSource*. Our work aims to build on and align with their programs and tools, notably the New Plastics Economy Global Commitment, led by the Ellen MacArthur Foundation and UN Environment Programme (UNEP).



IMPLEMENTATION PARTNERS

Implementation Partners are organizations that scale the reach and impact of *ReSource* activities. The American Beverage Association (ABA) became an Implementation Partner in 2019 to align measurement methods and programmatic expertise with its Every Bottle Back initiative, focused on increasing PET recycling in the United States. In 2020, the U.S. Plastics Pact joined ABA as a *ReSource* Implementation Partner, utilizing the *ReSource* Footprint Tracker as a measurement tool for annual progress tracking. In 2022, the Canada Plastics Pact used the *ReSource* Footprint Tracker to measure its progress for the first time.

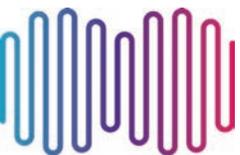


OTHER COLLABORATORS

ReSource also collaborates with peer organizations and initiatives to strengthen our methodology and amplify our efforts. A key collaborator in addition to those above is the World Economic Forum's Consumers Beyond Waste initiative. We also acknowledge and appreciate the contributions that Wood Mackenzie, The Recycling Partnership, Circulate Capital, and the Plastic Leak Project made to the design of the *ReSource* Footprint Tracker.



@ Paul Colangelo / WWF-US



Measure Results and Progress Report

Transparent 2023 is the fourth annual report that details *ReSource* Members' plastic footprints and tracks progress on corporate actions. This publication provides recommendations for action, both internal to company supply chains and across wider multi-stakeholder efforts.

Methodology

The *ReSource* Footprint Tracker is the mechanism that enables *ReSource* Members to measure, maximize, and multiply the impact of their actions on plastic. The methodology provides insight into how much and what types of plastic companies use, the source of the material, and where it goes upon disposal—whether it circulates back into the system or becomes a wasted resource.

Detailed information about each component of the Tracker, including survey structure, data sources, assumptions, and limitations, can be found in the publication [ReSource Footprint Tracker Methodology Overview](#).

No significant updates were made to the quantitative data collection survey or methodology for the 2022 reporting period. Existing data sources in the waste management model were reviewed, and updated recycling rates were added when available. WWF is actively participating in the Plastic Footprint Network (PFN), which is an initiative led by EA – Earth Action to standardize plastic footprinting, and will ensure that any updated datasets on plastic mismanagement that are released as part of the PFN methodology are integrated into the ReSource Footprint Tracker to ensure alignment.

The main update for this reporting period was the addition of a primarily qualitative survey asking Members about their active reuse programs. For each reuse program, the survey asked Members to describe the product, packaging, and use cycle, as well as quantitative reuse metrics aligned with the World Economic Forum's Consumers Beyond Waste initiative on the number of functional units and the percent of portfolio delivered by reuse.

INTERPRETING THE ASSESSMENT

As *ReSource* has been developed to bring the disparate variables that contribute to the global plastic waste problem into a single framework, there are inevitable challenges in the data collection process. Companies have very different systems for tracking plastic throughout their supply chains, and global data on plastic waste management is not consistently collected. When reviewing the findings of the assessment, please consider the following data limitations and assumptions:

- The ReSource Footprint Tracker relies on Members to provide accurate data. WWF works with Members to identify inconsistencies and fill data gaps, but the data submitted by companies for this report were not verified or audited by a third party that was engaged by WWF.
- Data collection methodologies and reporting scopes vary somewhat between Members. Detailed information about what is covered by the reported data is provided in each company's individual results section.

- Due to the limited availability of waste management data in several key geographies, in many regions it is currently not possible to meaningfully distinguish between an individual company's plastic waste footprint and national averages. Therefore, waste management outcomes are reported in the aggregate in this report and not on an individual company basis.
- Lastly, this assessment represents a relatively small set of companies, so there are limitations on what can be concluded from the results. While these nine companies are well-known global companies and leaders in their respective industries, they are not necessarily representative of these industries as a whole or of the global plastic waste situation.

As *ReSource* grows, we will work to enable broader use of the ReSource Footprint Tracker so that the aggregated data produce more generalizable insights across industries.

2022 Results

COMPANY PORTFOLIO AND CONTEXT

ReSource Members reported a total of 5.10 million metric tons of plastic in 2022 that was sold to retailers and consumers or discarded in-house. In addition, 2.16 million metric tons of plastic were sold business-to-business. Note that whenever plastic footprints are aggregated across Members in this report, there is potential for double counting of any plastic sold between *ReSource* Members. It should also be noted that The Coca-Cola Company and Amcor together account for 78% of the total reported volume, which can skew aggregate results.

The global plastic packaging market was estimated to be 139 million metric tons in 2021.⁸ Using this figure, *ReSource* Members' contribution to annual global plastic packaging (excluding business-to-business volumes) is approximately 3.7%. The total plastic tonnage reported by *ReSource* Members increased by 0.8% from 2021 to 2022.

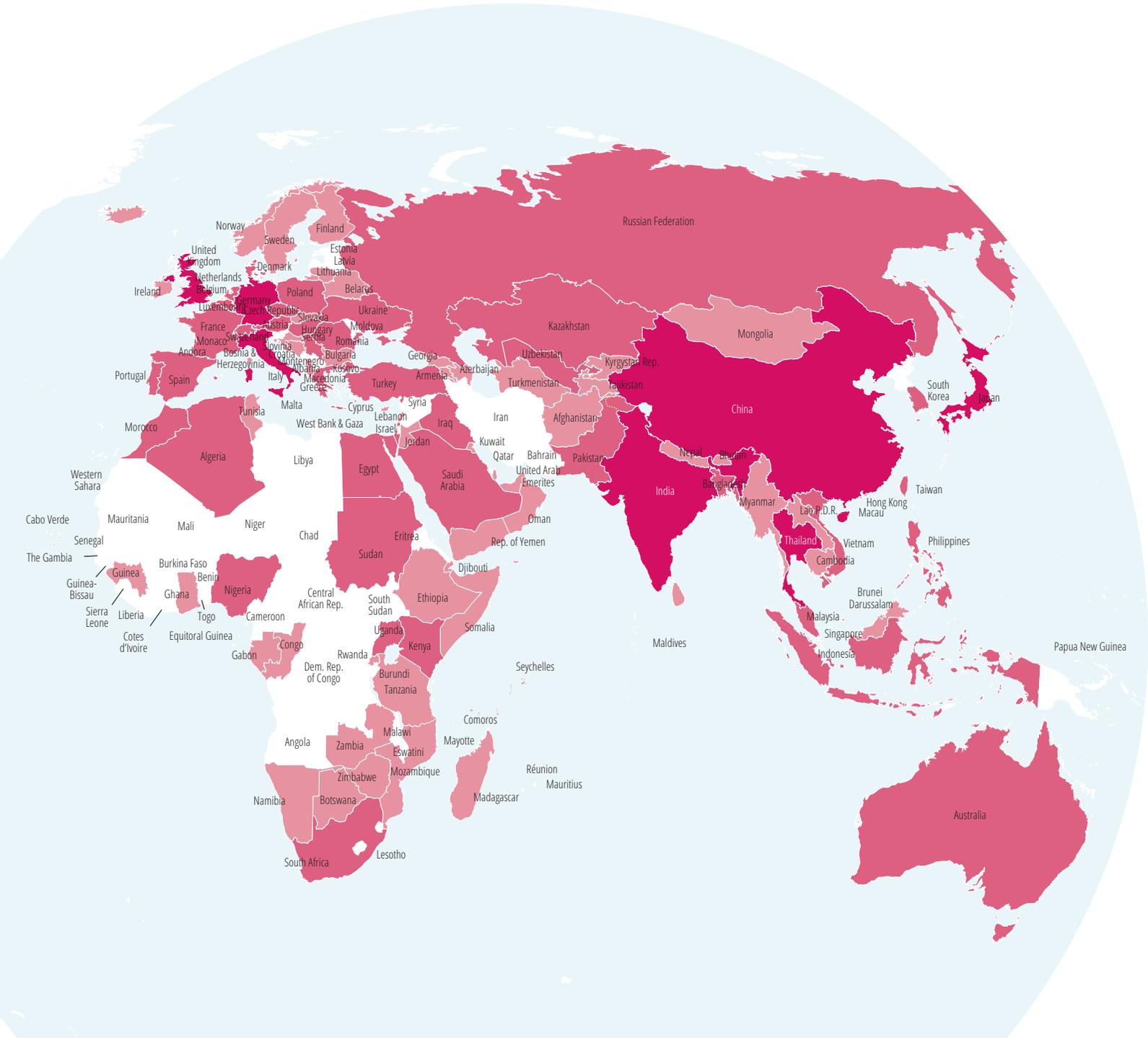


TABLE 1. Total plastic tonnages for the 2018 through 2022 reporting periods. Bold figures indicate each Member’s baseline year. Tonnages have been rounded to three significant figures.

	2018	2019	2020	2021	2022
Amcor	-	-	2,360,000	2,370,000	2,160,000
Colgate-Palmolive	-	-	289,000	279,000	260,000
CVS Health	-	-	-	12,100	11,600
Keurig Dr Pepper	208,000	230,000	230,000	243,000	247,000
Kimberly-Clark	-	111,000	106,000	86,400	105,000
McDonald’s	153,000	181,000	156,000	162,000	164,000
Procter & Gamble	-	605,000	609,000	679,000	685,000
Starbucks	191,000	133,000	121,000	151,000	153,000
The Coca-Cola Company	3,010,000	3,100,000	2,960,000	3,220,000	3,470,000

Table 1 presents the total plastic tonnages reported by *ReSource* Members in each year since their baseline. Of the nine Members, four have reduced and five have increased their absolute tonnage of plastic since their baseline.

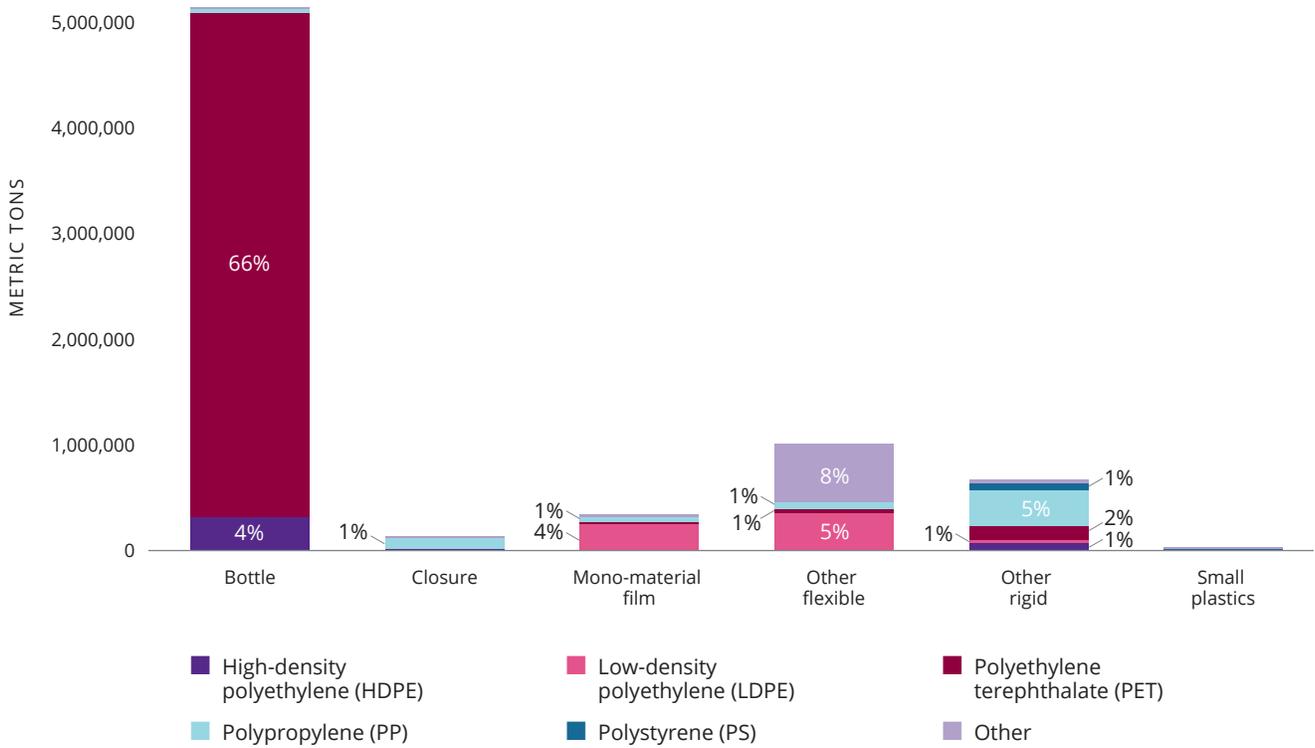
Looking at tonnage changes relative to a normalization factor provides additional context for understanding Members’ tonnage changes year-over-year. If a company increases its sales from one year to the next, its plastic tonnage would also be expected to increase, all else being equal. Conversely, if sales decrease, as they generally did during the COVID-19 pandemic, plastic use can drop significantly without companies necessarily making changes to their plastic portfolios. Ideally, the normalization factor would get at the concept of “plastic intensity,” or the amount of plastic being used per functional unit or serving of a company’s product being sold. However, finding a metric that does this across companies is difficult. *ReSource* Members use a normalization factor based on either revenue or units of packaging.

As of 2022, seven out of the nine *ReSource* Members have decreased their plastic use relative to their normalization factor since their baseline year (see Appendix A for details and further discussion on normalization factors). While using normalization factors can provide useful context, it is important to note that, ultimately, the expectation is that companies will reduce their absolute tonnage of plastic even as they grow.

The *ReSource* Footprint Tracker includes an analysis of product form and polymer composition (Figure 3). An understanding of the distribution of forms and polymers used by Members can help inform mitigation actions, including opportunities to redesign, substitute material types, and adopt innovative business models to eliminate unnecessary plastic. Key findings include:

- Rigid plastics account for 81.5% of plastic used by *ReSource* Members, with flexibles accounting for the remaining 18.5%.

FIGURE 3. Polymer breakdown by form category for *ReSource* Members' aggregate plastic portfolio. The Other category includes anything categorized "Other," as well as PETG, PVC, LLDPE, PLA, PHA, and EVOH, due to low reported volumes.



- PET bottles are the most common packaging type in the aggregate portfolio at 65.5%. This is followed by other flexibles at 13.8%, which includes 7.3% that is categorized as "other" polymers, referring to multi-material flexibles using multiple polymers. PET bottles are primarily used for beverage bottles. "Other flexibles" includes multi-laminate flexible packaging, with two or more materials bonded together, which is used for a wide range of applications across different industries.

Results in the following sections are reported in relation to progress and action on the recommendations in *Transparent 2022*. All percentages are by weight of plastic. Portfolios differ significantly across *ReSource* Members, which significantly influences the average results presented below. Highlights from the aggregate results include the following:

- The total weight of plastic in the aggregate portfolio increased by 0.8% from 7.20 million metric tons in 2021 to 7.26 million metric tons in 2022.
- The average use of recycled content across the aggregate portfolio increased to 12.0% in 2022, up from 10.2% in 2021.
- The share of packaging that is recyclable increased to 72.5% in 2022 from 70.4% in 2021.
- Based on WWF's waste management model, 34% of *ReSource* Members' plastic footprint is estimated to be recycled, 9% incinerated, 42% landfilled, and 15% mismanaged.

ELIMINATE UNNECESSARY PLASTIC THROUGH BUSINESS MODEL INNOVATION, REDUCTION, AND SUBSTITUTION

Elimination and Reduction of Virgin Fossil Plastic

The elimination and reduction of virgin fossil-based plastic is the most important action that companies can take to work toward a future with no plastic in nature. *ReSource* Members have eliminated and reduced plastic in their portfolio using a wide range of strategies—from lightweighting and replacing plastic with alternative materials to shifting to reuse models and introducing durable products that replace single-use products. Specific actions taken by *ReSource* Members to reduce plastic waste during the reporting period are detailed in the individual company sections.

Five *ReSource* Members saw an overall reduction in their virgin fossil-based plastic tonnage from 2021 to 2022. The remaining four *ReSource* Members had increases in their total virgin fossil-based plastic tonnage (Table 2). It's difficult to identify the specific drivers of these increases, but they could include overall growth of the companies

and continued economic recovery from the COVID-19 pandemic as well as increased use of plastic. However, companies should strive to reduce their use of virgin fossil-based plastic even as they grow, and most *ReSource* Members have committed to absolute reductions targets for virgin fossil-based plastic.

Eliminating Problematic and Unnecessary Plastic

Eliminating problematic and unnecessary plastic continues to be a key strategy for *ReSource* Members. Problematic plastics are those that contain hazardous chemicals, hinder or disrupt the recyclability or compostability of other items, and/or have a high likelihood of leaking into the environment. Not all problematic plastics can be identified in the data collected through the *ReSource* Footprint Tracker, so for the purposes of this analysis, problematic plastics are defined as polystyrene (PS), polyvinyl chloride (PVC), and small plastics. Small plastics are defined as being smaller than 2 inches in two dimensions, and for *ReSource* Members, primarily consist of straws, cutlery, beverage stirrers/plugs, and specialty containers. Small plastics often have difficulty

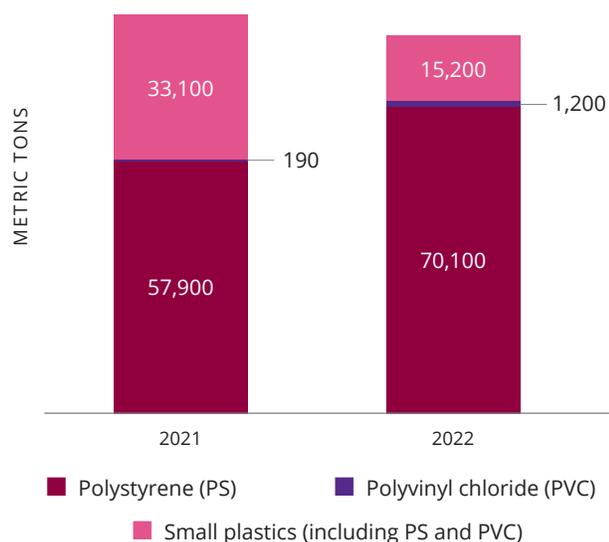
TABLE 2. Change in the tonnage of virgin fossil-based plastic used by *ReSource* Members from 2021 to 2022. Tonnages have been rounded to three significant figures.

	Virgin Fossil-Based Plastic Tonnage		
	2021	2022	Change
Amcor	2,230,000	1,970,000	-11.5%
Colgate-Palmolive	239,000	222,000	-7.2%
CVS Health	11,900	11,600	-2.5%
Keurig Dr Pepper	215,000	203,000	-5.8%
Kimberly-Clark	83,700	102,000	+21.8%
McDonald's	157,000	158,000	+0.3%
Procter & Gamble	595,000	612,000	+2.9%
Starbucks	141,000	136,000	-4.0%
The Coca-Cola Company	2,770,000	2,950,000	+6.5%

being captured in the recycling stream due to their size. Unnecessary plastics are ones that can be avoided or replaced by a reuse model while maintaining utility. These are also difficult to quantify based on data collected through *ReSource* but are discussed qualitatively in the individual company sections.

Overall, problematic plastics made up 1.2% (87,000 metric tons) in 2022, a decrease from 1.3% (91,000 metric tons) in 2021. The total tonnage of small plastics continued to decrease in 2022. However, the overall tonnage of PS increased by 10,000 metric tons and overall tonnage of PVC increased by 1,000 metric tons from 2021 to 2022. The increase in PS was driven primarily by increases in Amcor’s and P&G’s portfolios, with Amcor’s increase being due to improvements in reporting and not a true increase in use.

FIGURE 4. Tonnage of problematic plastics reported by *ReSource* Members in 2021 and 2022.



New Business Models and Reuse

A majority of the plastic portfolios of *ReSource* Members continues to be single-use and disposable. New business models like reuse are an avenue to reducing overall plastic usage and shifting away from a linear “take-make-waste” model. Many Members include refill and reuse models as a key part of their strategy to reduce plastic pollution and are involved in working groups with efforts to scale reuse at a national and/or global level. All nine *ReSource* Members are working on reuse in some capacity.

This is the first year that *ReSource* has comprehensively collected data from Members specifically on their efforts on reuse. *ReSource* Members were asked to provide qualitative and quantitative data on the four reuse models defined by the Ellen MacArthur Foundation—refill on the go, refill at home, return on the go, and return from home.⁹ Members shared information about their efforts on each of these reuse modalities, but also shared progress and impact on other activities and innovations that fall outside the scope of these four modalities, including reusable products and reuse in B2B operations. As this is the first reporting period that comprehensively includes reuse, the reported information is less comprehensive than on other topics, and there are many opportunities to build on the information collected throughout the upcoming year and sharing learnings to find the best ways to eliminate plastic waste through reuse.

The Coca-Cola Company delivered 14% of its total beverage volume in reusable packaging in 2022. This percentage includes refill and return pilots in markets around the globe as well as fully scaled reuse programs in several markets. In France, the company offers Coca-Cola and Coca-Cola Zero Sugar in reusable glass bottles (RGB) nationwide and has launched RGBs for additional beverages in hotels, restaurants, and cafés. In some markets, for World Environment Day, the company invited consumers in Latin America to trade any recyclable PET bottle for a refillable bottle of Coca-Cola Zero Sugar. In Brazil, reusable PET bottles, known as the “Universal Bottle,” can be returned, cleaned, and refilled multiple times. In the United States, the company piloted a returnable glass bottle program in El Paso, Texas, which generated a 75% return rate. The Coca-Cola Company is also working with Reuse Seattle to encourage customers to transition to reusable cups for the dispensed products as part of a broader multi-stakeholder effort across the region.

Some *ReSource* Members moderately increased the scale of established reuse programs. Keurig Dr Pepper has a long-established reuse operation in Mexico that has been active since the founding of the company. They have existing infrastructure that enables glass bottles to be collected and returned, where they are inspected, cleaned, refilled, packaged, and sent back to market. The average bottle in this system is used 50 times. KDP also uses reusable packaging extensively within its B2B

operations in the form of beverage crates and pallets. Colgate-Palmolive delivers 1.8% of its total plastic tonnage by the refill at home modality through its liquid hand soap business.

Starbucks has had a lot of experience experimenting with reuse models, with more than 20 pilots taking place globally over the past few years. Perhaps the most ubiquitous reuse option is the company's Personal Cup program, which falls under the refill on the go modality. The customer brings their own cup to the store and receives a \$0.10 discount; Starbucks Rewards members also receive 25 Bonus Stars. Their drink is served in that cup, and they bring it home to wash. Customers have been able to bring their personal cups when ordering in café, and starting in 2024, customers in the United States and Canada will be able to participate in the Personal Cup program at Starbucks stores when ordering at the drive-thru or through mobile order. In some global markets, stores also have a Borrow-A-Cup program, where a customer can take a returnable cup to go and return it later, so it can be washed and reused.

While durable glasses and cups are standard in most sit-down food service establishments, shifting from single use to reusables for takeaway-oriented establishments does present a large opportunity for eliminating plastic waste. Starbucks has some locations that offer their For-Here-Ware program to dine-in customers, where beverages are served in reusable cups and washed in dishwashers in the store and used again. Building on pilots from previous years, McDonald's continues scaling the implementation of reusable packaging focused in key geographies, and is sharing learnings across markets to assess its effectiveness. In 2022, McDonald's offered reusable cups for cold drinks in South Korea, introduced reusable tableware for dine-in use in France, and launched reusable cups for beverages and desserts in Germany.

Several companies are enabling reuse not through their packaging design, but by the design of their products. Kimberly-Clark and Colgate-Palmolive have reusable products that aim at displacing disposable products. Kimberly-Clark is commercializing reusable underwear for menstrual needs and reusable swim diapers for babies. Colgate-Palmolive has introduced toothbrushes with durable metal handles and replaceable heads,

giving consumers the option to reuse the handle and only replace the head after it has been worn out from repeated use, which results in at least 80% less plastic waste.

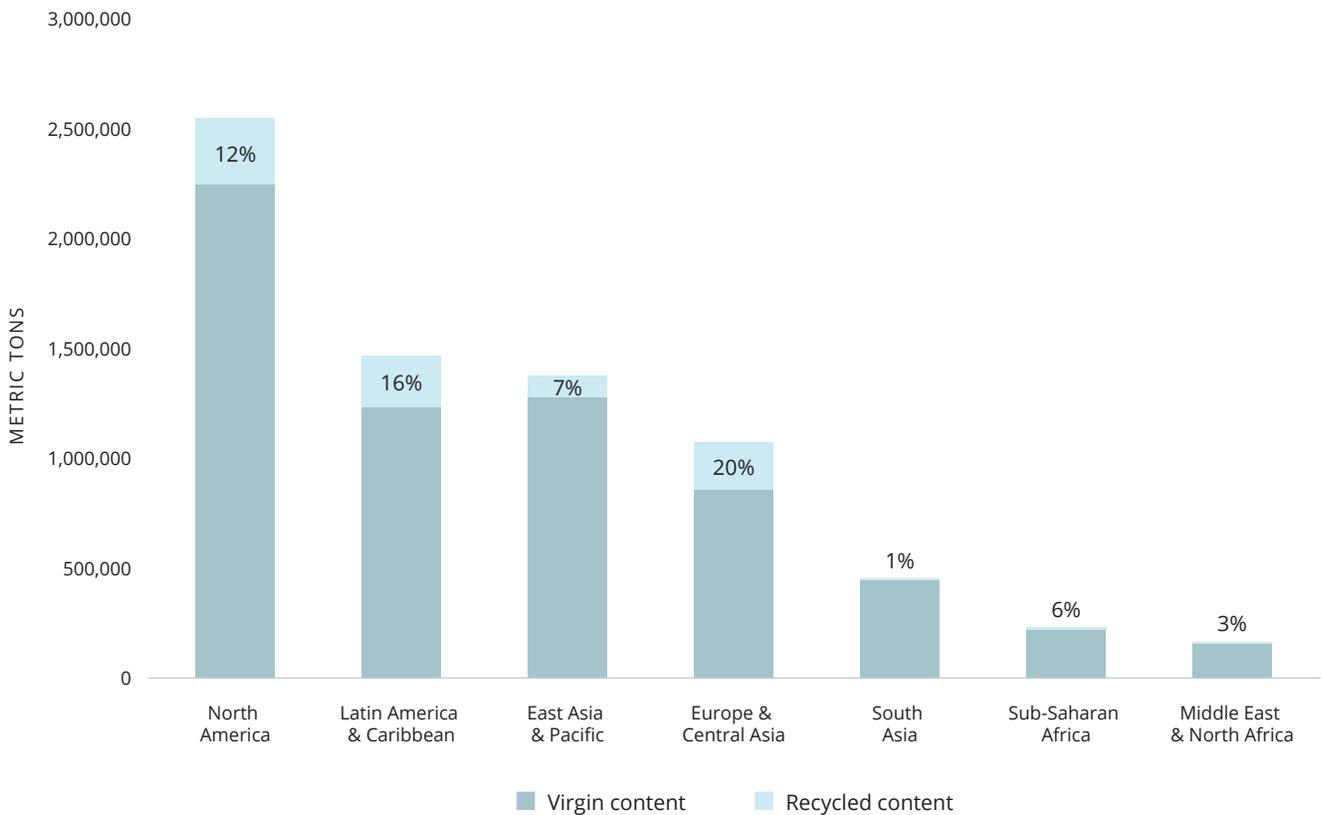
Packaging producer Amcor is enabling reuse systems for business customers by manufacturing reusable bottles and auxiliary refill packages that are much lighter in weight than traditional rigid packaging. The company's reusable beverage bottles, which are used in refill on the go systems, are designed to achieve 25 loops. Amcor manufactured 32.6 million refillable beverage bottles, potentially enabling 815 million beverages to be delivered through refill on the go systems. Amcor's auxiliary refill pouches are used in refill at home applications and are designed to be recycle-ready, although they are not widely accepted by recyclers today. Amcor enabled up to 25.6 million refill at home deliveries through these auxiliary refill pouches. Amcor also uses reusable packaging in its B2B delivery and within its own operations. CVS Health piloted a reusable shopping bag rental and return system in New Jersey and is using the learnings from these pilots to inform its strategy on single-use plastic bags.

SHIFT TO SUSTAINABLE INPUTS FOR REMAINING PLASTIC

After taking action to eliminate what is unnecessary, shifting to sustainable inputs for remaining plastic is a key step to reduce the environmental impacts of material sourcing. Sustainable inputs include recycled content, responsibly sourced biobased content,¹⁰ and other innovative materials in the future. In this report, recycled content refers only to post-consumer recycled content, unless otherwise specified. Key findings include:

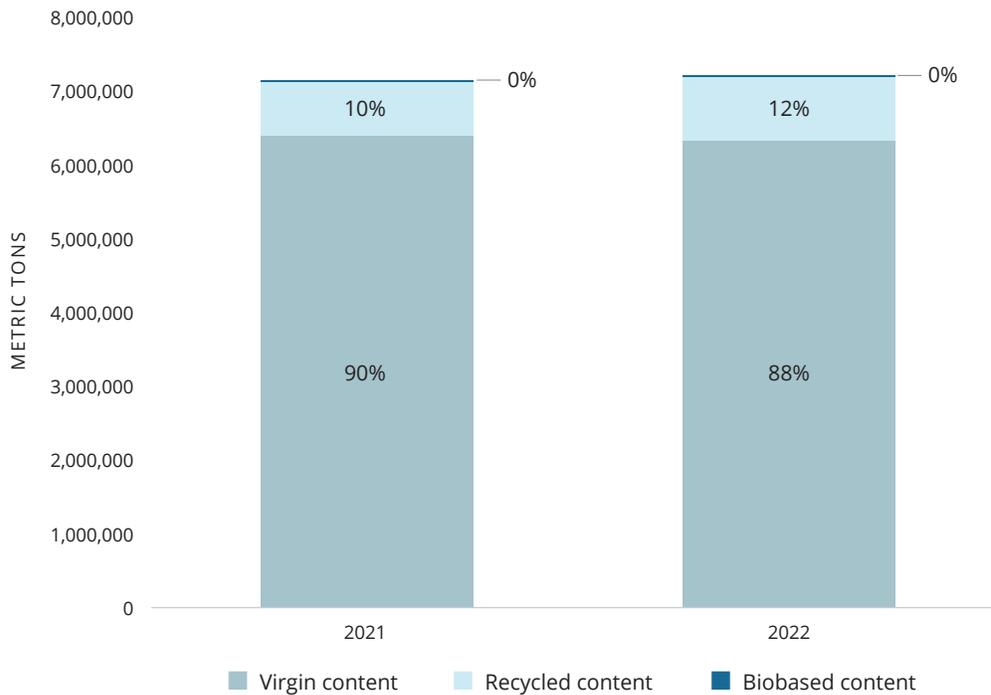
- The majority of plastic across the aggregate portfolio is derived from virgin fossil-based inputs, totaling 87.9%, equivalent to 6.37 million metric tons. This is 76,900 metric tons or 1.2% less than in 2021. Across *ReSource* Members, the use of virgin fossil-based content ranges from 82.3% to 100.0%.
- Recycled content increased to 12.0% of the aggregate portfolio in 2022, up from 10.2% in 2021. The use of recycled content ranges from unknown (reported as 0.0%) to 17.7% across *ReSource* Members.

FIGURE 5. Distribution of recycled content by region for *ReSource* Members in 2022.



- By region, 20% of Europe & Central Asia's plastic portfolio is made of recycled content, followed by 16% in Latin America & Caribbean, 12% in North America, 7% in East Asia & Pacific, 6% in Sub-Saharan Africa, 3% in the Middle East & North Africa, and 1% in South Asia.
- By form, 95% of recycled content was reported in bottles and 4% was in other rigid packaging.
- Biobased content continues to make up only a fraction of a percent of the aggregate portfolio. In 2022, biobased content comprised 0.3% of the overall plastic footprint, equivalent to 19,700 metric tons. In 2022, 38% of this biobased content was specified as being responsibly sourced, down from 65% in 2021.
- Nearly 21% of all small plastics are made of biobased content.
- By region, 72% of biobased content was reported in North America, 22% in East Asia & Pacific, 2% in Europe & Central Asia, and 1% in Latin America & Caribbean, the Middle East & North Africa, and South Asia, and 0% in Sub-Saharan Africa.
- By form, 31% of biobased content was reported in flexibles, 30% in other rigid packaging, 21% in bottles, 17% in small plastics, and 1% in closures.

FIGURE 6. Sustainable and virgin fossil-based inputs for *ReSource* Members in 2021 and 2022.



DOUBLE GLOBAL RECYCLING AND COMPOSTING OF PLASTIC

There are several ways *ReSource* Members can contribute toward the goal of doubling recycling and composting globally. Actions range from making changes to their own packaging portfolio to engaging in collective action to scale collection and recycling of plastic to advocating for policy to make recycling and composting more accessible around the world.

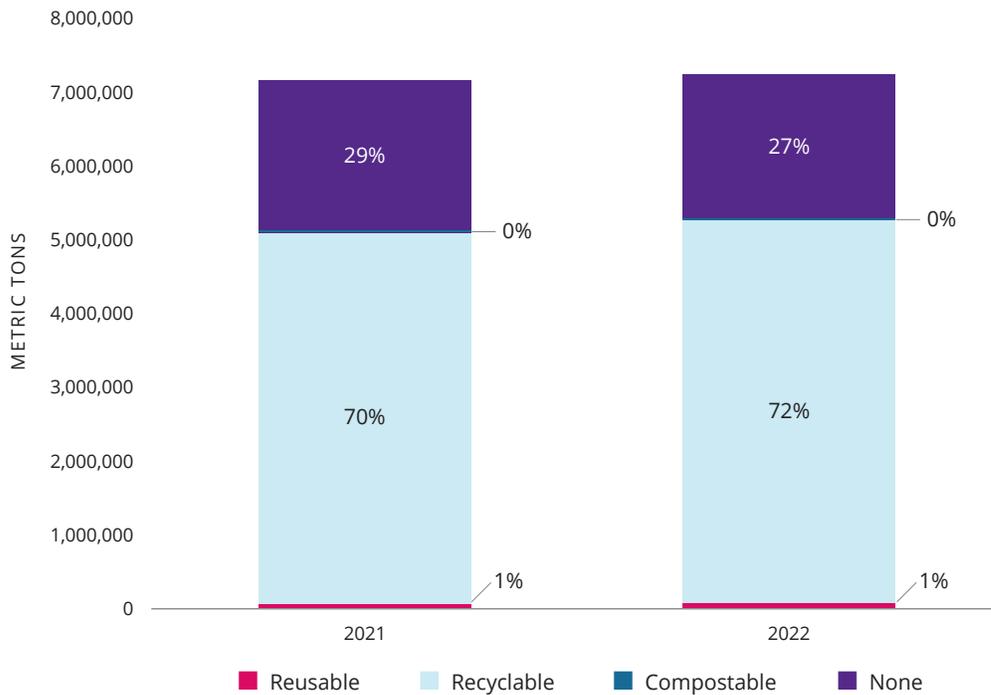
Targeting Factors Within Immediate Business Control

The most direct way that *ReSource* Members can increase recycling and composting rates is by designing their packaging with the end of use at the front of mind. It’s important that products are designed to be recycled, composted, or reused. In 2022, 72% of Members’ plastic packaging was recyclable in practice and at scale.¹¹ This is an increase from 70% in 2021, primarily due to a slight increase in the proportion of PET bottles in the aggregate portfolio. Companies can transform their portfolios by eliminating hard-to-recycle forms and polymers, such as PS, PVC, and small plastics, from their portfolios. Additionally, increasing their use of sustainable inputs

helps drive the demand for recycled inputs by incentivizing individuals and businesses to recycle more to increase supply.

Just because packaging is designed to be recyclable doesn’t always mean it will actually be recycled in practice. Often, recycling infrastructure doesn’t have the capacity to handle the large volumes of waste that are being generated, or it isn’t economically viable, and many parts of the world have little to no waste management infrastructure at all. Understanding the waste management situation in the specific markets a company is operating in is key to improving packaging circularity and minimizing plastic leakage. WWF’s waste management model provides an estimate of how much packaging is recycled, incinerated, landfilled, and mismanaged in practice based on country-level waste management data and the amounts and types of plastic sold by Members in each country. The analysis of waste management pathways is intended to help WWF and *ReSource* Members identify opportunities in key geographies to eliminate or substitute plastics at high risk of mismanagement, design for local recycling or composting infrastructure, and invest in improving waste management systems. For instance, designing packaging

FIGURE 7. Share of reusable, recyclable, or compostable packaging for *ReSource* Members in 2021 and 2022.



to be more recyclable will have limited impact in regions lacking recycling infrastructure and with high rates of mismanagement. In these regions, other solutions such as elimination, material substitution, or new business models and reuse should be prioritized, in addition to engaging with governments to implement effective waste management systems.

In 2022, 34% of *ReSource* Members' plastic footprint was estimated to be recycled, 9% incinerated, 42% landfilled, and 15% mismanaged. This is very similar to the estimates in 2021 due to the portfolio breakdown by country, form, and polymer remaining quite consistent across the two years.

Waste management pathways were further calculated with the distinction between rigids and flexible plastics (Figure 8). The difference in recycling rates between rigids (41%) and flexibles (3%) reflects the trend that rigid plastics, and particularly bottles, which account for 70% of the aggregate portfolio of *ReSource* Members, continue to be recycled at a higher rate than flexible plastics. Meanwhile, flexibles are estimated to be incinerated, landfilled, and mismanaged at higher rates than rigids.

Waste Management Regional Breakdown

The likely waste management pathways for plastics by region are aggregated based on *ReSource* Members' reported plastic volumes by country within set regions (Figure 9 and outlined in Appendix C). These regional waste management estimates are based on the geographical distribution of sales and proportions of plastic types within the aggregate portfolio of *ReSource* Members and thus are not meant to be representative of the end life of plastics across all sectors in these regions.

Regionally, *ReSource* Members' aggregate plastic footprint is most heavily concentrated in North America, with 35% of the total tonnage. Because all Members have a large presence in North America, this is the region where there is the most diversity of plastic types in the aggregate portfolio and thereby where the estimated waste management outcomes more closely resemble regional averages. The Europe & Central Asia region also has a comparatively balanced mix of plastic types, making the *ReSource* estimates more representative of the overall waste management situation in that region.

FIGURE 8. Waste management outcomes for rigid versus flexible plastics for *ReSource* Members in 2022.

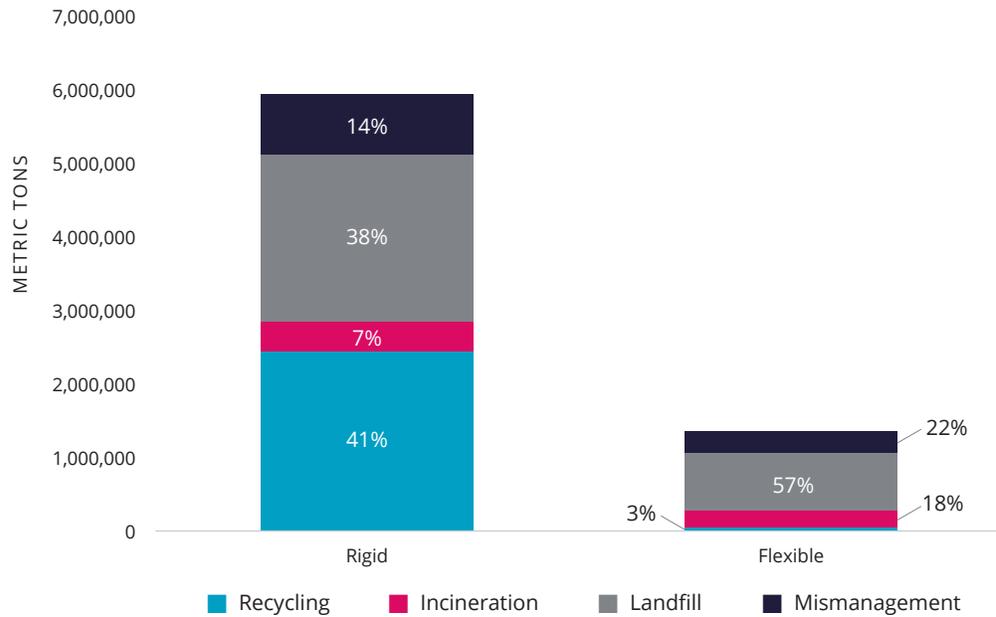
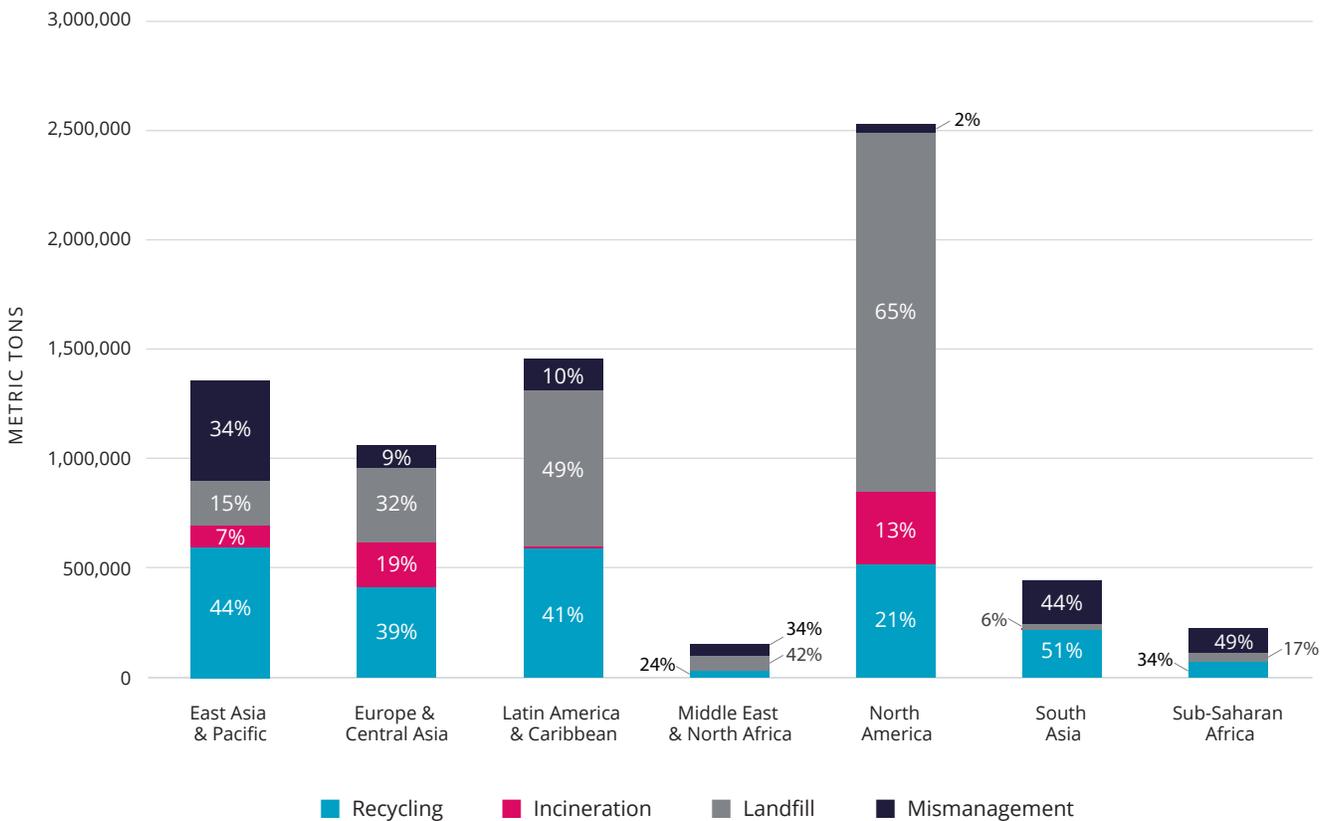


FIGURE 9. Estimated waste management outcomes by region for *ReSource* Members in 2022.





The results for other regions are affected by higher proportions of PET bottles (70–99%), which tend to have high recycling rates. For instance, East Asia & Pacific, South Asia, and Sub-Saharan Africa are all characterized by both high estimated rates of recycling and mismanagement. This is driven by a high proportion of the aggregate portfolio in these countries being PET bottles, and our model having to reconcile both high reported rates of PET bottle recycling and high rates of mismanagement of plastic. Although true for the results in general, the estimates for these regions in particular are uncertain due to limited and often conflicting waste management data and are not representative of the regions' overall waste management situation.

Given both the relatively large sales volumes and high mismanagement rates, China and the broader East Asia & Pacific region continue to be the country and region with the highest estimated total tonnage of mismanaged waste for *ReSource* Members.

For more information about the country-level data and assumptions informing the waste management model, please see the [ReSource Footprint Tracker Methodology Overview](#) and the model [assumptions](#).

Individual Member Footprints and Progress

The following sections explore individual *ReSource* Members' footprints; please see Appendix B for summary tables.



Amcor

The data provided by Amcor cover flexible and rigid packaging produced by the company, accounting for 100% of businesses producing plastic packaging and an estimated 83% of the company's overall operations. Secondary packaging, tertiary packaging, and Amcor's Specialty Cartons business are out of scope for this assessment. The reported data cover the period July 1, 2022, through June 30, 2023.

Key changes to Amcor's portfolio include:

- Amcor increased its use of recycled content from 5.6% in 2021 to 8.4% in 2022.
- In 2022, plastic categorized as "other" polymers represented 22.1% of Amcor's portfolio, primarily in its multi-material flexible packaging that contains several different polymers, and where it is difficult to specify the tonnage of each. In 2021, only 0.03% was categorized as "other" polymers as Amcor indicated the primary polymer in each format; however, this can skew the consolidated polymer data leading to a change in categorization in 2022.
- The other flexible category increased from 36.4% in 2021 to 37.5%, while the mono-material film category decreased from 11.0% in 2021 to 9.0% in 2022.

INSIGHTS ON AMCOR'S PROGRESS

As part of the company's efforts to address problematic and unnecessary packaging, Amcor eliminated PVC from blister packs in Europe using Amsky, Amcor's PVC- and aluminum-free technology. In North America, the company qualified an alternative to carbon black for CPET trays, allowing for more effective sortation at MRFs. On sustainable inputs, Amcor has continued increasing the usage of rPET, reaching 17% post-consumer recycled content usage by weight in its rigid packaging during the reporting period. Amcor has expanded its portfolio of recycle-ready products, with 94.9% and 47.8% of its rigid and flexible plastic portfolios, respectively, sold as recycle-ready by weight during the reporting period. Additionally, the company now offers flexible recycle-ready alternatives for 90% of its products, measured in square meters.

On reuse, Amcor provides reusable PET bottles and auxiliary refill pouches that are interchangeable for several products. Amcor's containers are designed for 25 loops per beverage bottle. All pouches are recycle ready.

AMCOR OVERVIEW AND GOALS

Amcor believes that sustainability goes far beyond the products that it makes. Nonetheless, the defining sustainability issue in the packaging industry is minimizing the presence of packaging waste in the environment. This is a challenge and an opportunity. The answer is responsible packaging, which rests on three pillars—innovating for product design, collaborating for better waste management and recycling infrastructure, and informing for greater consumer participation.

- *Amcor was the first packaging company to commit to all its packaging being recyclable or reusable by 2025, and, since making that commitment, it has*

gone further. By carefully selecting the raw materials used, considering the life cycle impacts of its packaging, and designing for optimal end-of-use, Amcor continues to demonstrate its leadership in responsible packaging.

- *Amcor has committed to increase its use of PCR resins across its portfolio from a target of 10% by 2025 to 30% by 2030.*
- *By 2030, Amcor will reduce its greenhouse gas emissions intensity by 60% compared to a 2006 baseline and has committed to net zero carbon emissions by 2050.*

FIGURE 10. Inputs, form, and polymer distribution of Amcor's plastic portfolio in 2022.

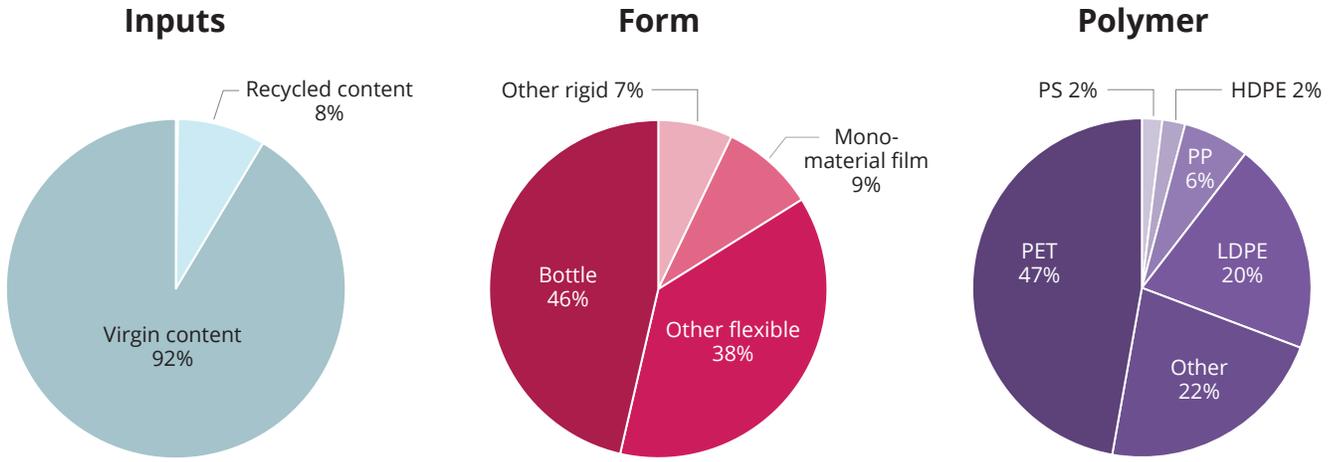
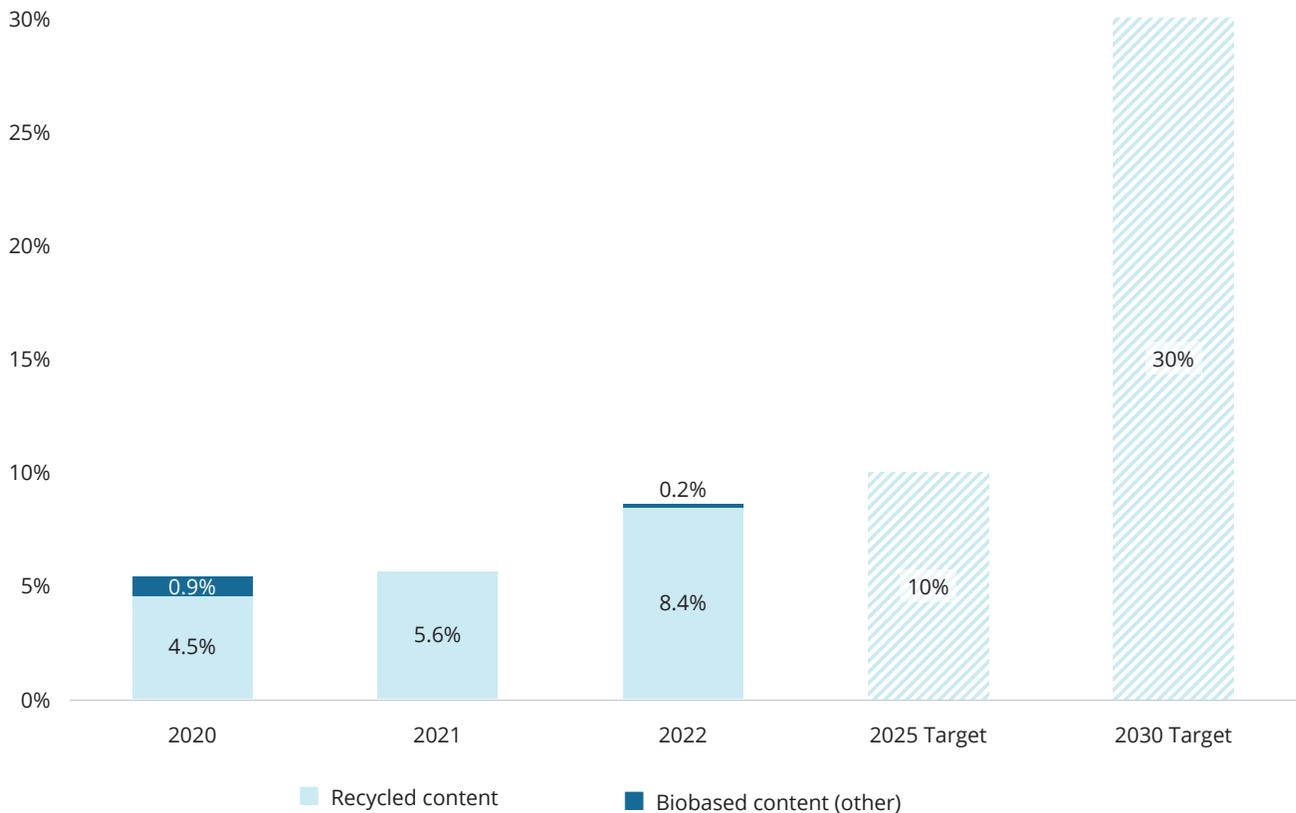


FIGURE 11. Use of sustainable inputs in Amcor's plastic portfolio from 2020 to 2022, and comparison to 2025 and 2030 targets.



Colgate-Palmolive

The data provided by Colgate-Palmolive cover all production happening in the company's facilities, accounting for more than 98% of the company's current sales and activities. Secondary and tertiary packaging are included in the reported data. The company's EltaMD, Filorga, hello, and PCA Skin businesses as well as co-packer packaging are out of scope for this assessment. The reported data cover the period January 1, 2022, through December 31, 2022.

Key changes to Colgate-Palmolive's portfolio include:

- Colgate-Palmolive's use of post-consumer recycled content increased slightly from 14.2% in 2021 to 14.7% in 2022.
- Other rigids (primarily PE toothpaste tubes) increased from 20.3% of the portfolio in 2021 to 36.6% in 2022. This was in part due to caps being recategorized from closures to other rigids.
- "Other" polymers represented 14.8% of Colgate-Palmolive's portfolio, up from 5.6% in 2021, while LDPE decreased from 27.5% to 17.3%, in part due to a change in categorization for multi-material flexibles.

INSIGHTS ON COLGATE-PALMOLIVE'S PROGRESS

Colgate-Palmolive continues to remove the small amount of remaining PVC from packaging and has transitioned out of

other problematic applications such as carbon black pigment and colored PET bottles in certain markets. The company also eliminated 1,049 tons of plastic globally through lightweighting various formats. In 2022, Colgate-Palmolive's use of post-consumer recycled content plastic in packaging reached 14.7%, in part through implementing 100% recycled content in PET bottles in certain applications and markets. Colgate-Palmolive is making significant progress in its efforts to transform the toothpaste category—approximately 20 billion tubes per year—and has shared its recyclable tube technology through 70+ sessions with the packaging industry, NGOs, and other companies. Other efforts to improve the recyclability of the company's portfolio included converting PS trays to PET in Poland and multi-material films to mono-material PE films for pouches in Europe.

On reuse, Colgate-Palmolive has a well-established business for liquid hand soap and body wash refills, where the refill is either a flexible pouch or rigid bottle that can refill existing bottle-closure/dispenser systems. By weight, approximately 1.8% of the company's total plastic tonnage is comprised of reusable liquid hand soap packages that can be refilled at home. Other refill at home solutions include hello toothpaste tablets, Palmolive Shake and Clean dish soap, and Colgate Keep and hello durable toothbrush handles with replaceable toothbrush heads.

COLGATE-PALMOLIVE OVERVIEW AND GOALS

Colgate-Palmolive is a caring, innovative growth company reimagining a healthier future for all people, their pets, and our planet. And with the Colgate brand in more homes than any other, Colgate feels the awesome responsibility to make sustainability an easy part of people's lives.

To help fulfill its purpose, in 2020, Colgate launched its 2025 Sustainability and Social Impact Strategy with three key ambitions as well as 11 actions and over 50 corresponding targets.

Colgate-Palmolive's 2025 packaging and plastics targets include:

- *Eliminate unnecessary and problematic plastics in packaging*
- *Convert all packaging to recyclable, reusable, or compostable*
- *Reduce new (virgin) plastic by one-third against a 2019 baseline*
- *Use 25% post-consumer recycled plastic across the packaging portfolio*

FIGURE 12. Inputs, form, and polymer distribution of Colgate-Palmolive's plastic portfolio in 2022.

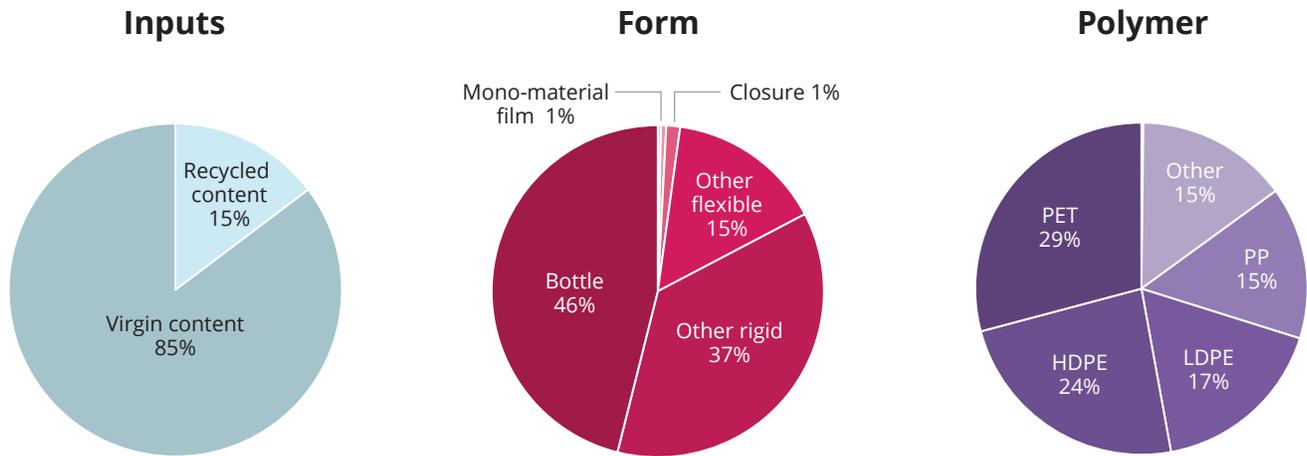
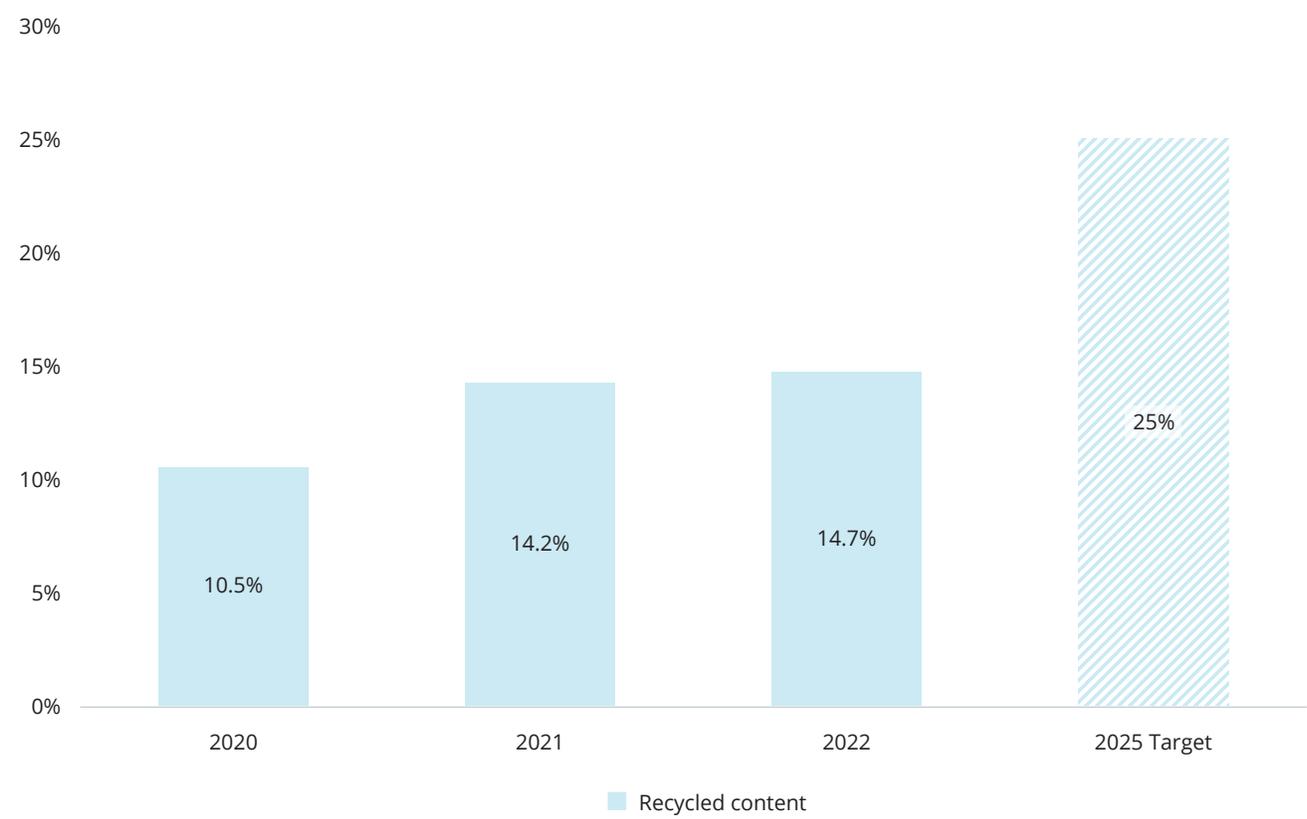


FIGURE 13. Use of post-consumer recycled content in Colgate-Palmolive's plastic portfolio from 2020 to 2022.





CVS Health

The data provided by CVS Health cover plastic in primary packaging for the company's Store Brand products in the United States, based on data from about 70% of suppliers. The data account for about 5-10% of the company's overall operations. Secondary and tertiary packaging, as well as the company's Retail Pharmacy, Distribution Centers, Mail Order Pharmacy, and Long-Term Care Pharmacy businesses are out of scope for this assessment. The reported data cover the period January 1, 2022, through December 31, 2022.

In the past year, CVS Health updated its data collection process, which will enable greater consistency moving forward. As a result of the change, different suppliers are included in the reported data, leading to significant changes in the company's portfolio compared to 2021. The suppliers included in 2022 are predominantly in the health care products categories as opposed to a subset of the largest suppliers irrespective of category in 2021.

Key changes to CVS Health's portfolio include:

- CVS Health was unable to collect data on recycled content for 2022. It is reported as 0.0%, as the actual percentage is unknown. In 2021, the company reported 1.6% recycled content.

- The share of several form categories changed significantly from 2021 to 2022, including bottles from 71.9% to 23.8%, other rigids from 12.0% to 46.2%, and other flexibles from 3.5% to 27.3%.
- PVC accounts for 4.8% of CVS Health's portfolio, compared to 1.1% in 2021.

INSIGHTS ON CVS HEALTH'S PROGRESS

Throughout the past year, CVS Health's collaboration with Closed Loop Partners and industry peers resulted in several tests of innovative bag solutions and infrastructure investments. The company has recently tested a reusable bag rental and return system in New Jersey, a bring-your-own bag campaign and a bagless store experience to drive consumer behavior change and scalable solutions.

CVS Health has continued to expand How2Recycle labeling on its Store Brand products. The company added How2Recycle messaging to 60% of active store brand SKUs in 2022 and is on track to achieve this across all Store Brand packaging by the end of 2024. The company also launched new products in 2023 centered on reuse, including its Gold Emblem® aluminum water bottles and Total Home® food storage bags.

CVS HEALTH OVERVIEW AND GOALS

CVS Health continues to put sustainability at the heart of the consumer experience, testing innovative solutions and advancing existing practices to reduce the impact of plastic. CVS Health has set the following sustainable packaging goals:

- *Ensure all packaging for Store Brands products is 100% reusable, recyclable, compostable, or can be returned to us for proper disposal at the end of life by 2030*

- *Reduce single-use virgin plastic in Store Brand packaging by 50% by 2030*
- *By 2023, define a list of packaging to be designated as problematic or unnecessary and take measures to eliminate them by 2030*

FIGURE 14. Inputs, form, and polymer distribution of CVS Health’s reported plastic portfolio in 2022.

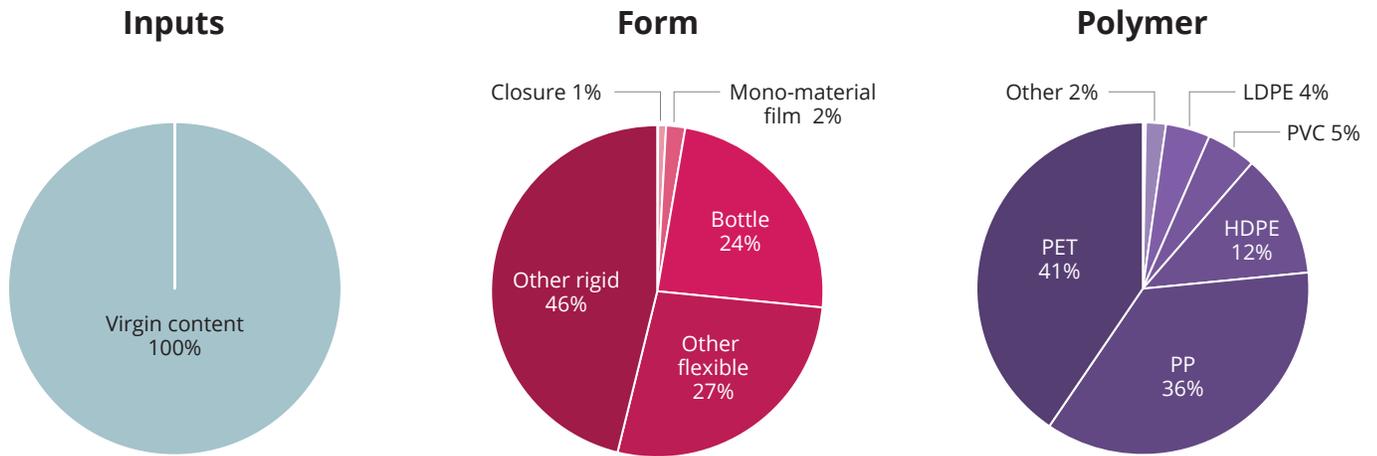
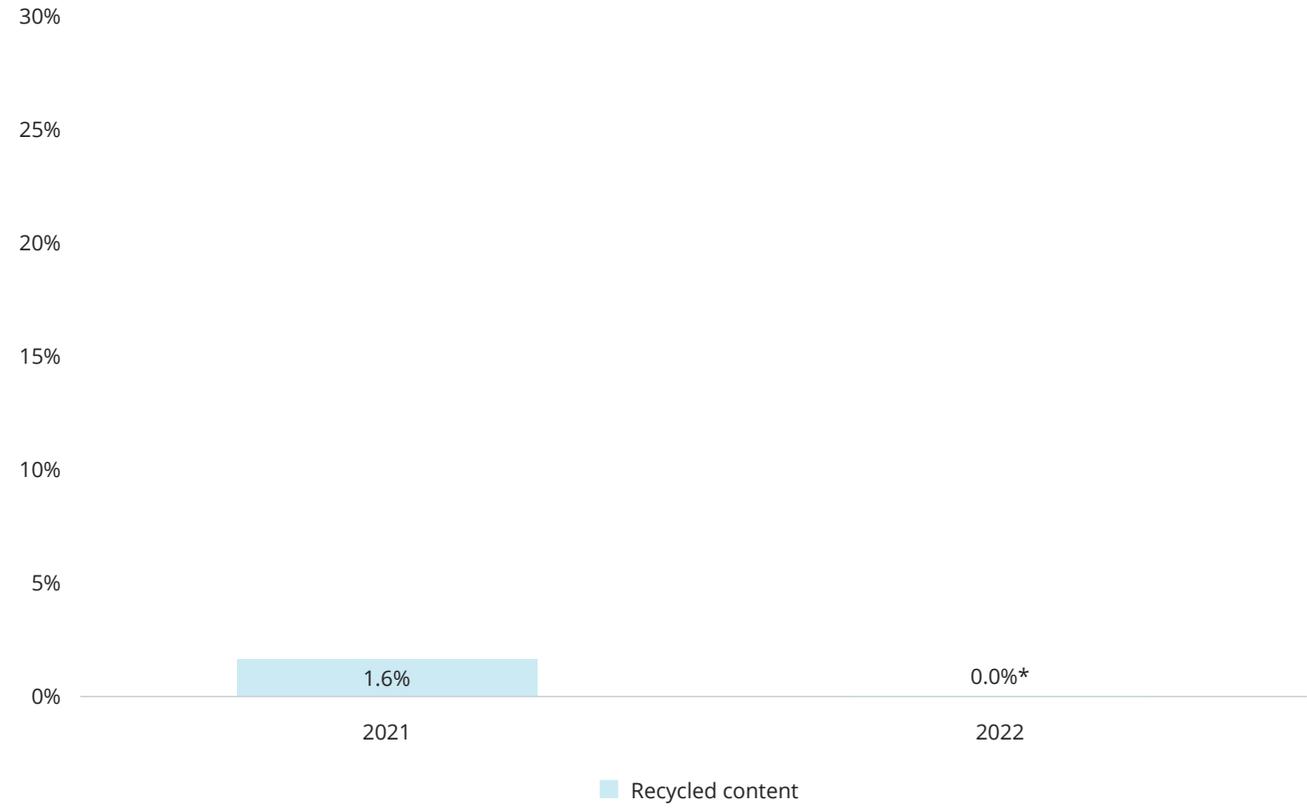


FIGURE 15. Use of post-consumer recycled content in CVS Health’s plastic portfolio from 2021 to 2022.



* CVS Health was unable to collect data on recycled content for 2022. It is reported as 0.0%, as the actual percentage is unknown.



Keurig Dr Pepper (KDP)

The data provided by Keurig Dr Pepper cover primary, secondary, and tertiary plastic packaging for the United States, Mexico, and Canada, which is comprehensive of the company's wholly owned operations. Franchised bottled beverage volumes are out of scope for this assessment. The reported data cover the period January 1, 2022, through December 31, 2022.

Key changes to Keurig Dr Pepper's portfolio include:

- Keurig Dr Pepper's use of recycled content increased significantly, from 11.5% in 2021 to 17.7% in 2022.
- In 2022, bottles made up 65.5% of the portfolio, a decrease from 75.2% in 2020. However, this is in part due to closures being reported together with bottles in 2021, which accounted for 8.0% of the portfolio in 2022 as opposed to 0.0% in 2021.
- Flexibles increased from 4.8% of the portfolio in 2021 to 6.6% in 2022.

INSIGHTS ON KEURIG DR PEPPER'S PROGRESS

Keurig Dr Pepper has reduced its virgin plastic footprint by 11% from the 2019 baseline, toward its goal of 20% by 2025, through increased use of post-consumer recycled content and lightweighting. In 2022, the company began the process of lightweighting its polypropylene K-Cup® pods, resulting in the reduction of plastic packaging used in each pod by approximately 18%. Keurig Dr Pepper's use of post-consumer recycled content reached 17.7% in 2022, spurred by the conversion of all Core Hydration and 16-ounce Snapple products to bottles made from 100% recycled PET. All Snapple 16-ounce packaging was also converted to be recyclable during the reporting period through the removal of metal closures and paper labels.

With regard to consumer-facing reusable packaging, Keurig Dr Pepper currently sells beverages in refillable glass bottles in Mexico where the infrastructure for collection, sanitation, and refill exists. An average bottle in the company's system lasts 50 turns in its life cycle before being recycled. The company also offers a reusable coffee filter called My K-Cup® for Keurig brewers, which acts as the pod and can be filled with any ground coffee.

KEURIG DR PEPPER OVERVIEW AND GOALS

Sustainable packaging is a top priority for Keurig Dr Pepper, demonstrated by the company's commitment to support the transition to a circular economy through investment, innovation, and collaboration. Keurig Dr Pepper's packaging strategy is centered on advancing the use of more sustainable packaging materials and designs that use less virgin plastic. Important to this reduction is incorporating more post-consumer recycled content, eliminating unnecessary materials, redesigning packaging to be compatible with recycling and composting systems, and exploring reuse and refill models. The company also encourages consumer recycling behaviors, invests in recycling infrastructure, and advocates for smart policy solutions, such as a well-designed Extended Producer Responsibility program. Since 2014, Keurig Dr Pepper has co-founded

three coalitions in support of a more circular economy and has invested nearly \$42 million in recycling infrastructure and education across North America.

Keurig Dr Pepper is committed to the following 2025 sustainable packaging goals:

- *100% of KDP packaging to be recyclable or compostable*
- *30% post-consumer recycled content used across the KDP packaging portfolio*
- *25% post-consumer recycled content used across the KDP plastic packaging portfolio*
- *20% virgin plastic reduction across KDP's plastic packaging portfolio*

FIGURE 16. Inputs, form, and polymer distribution of Keurig Dr Pepper's plastic portfolio in 2022.

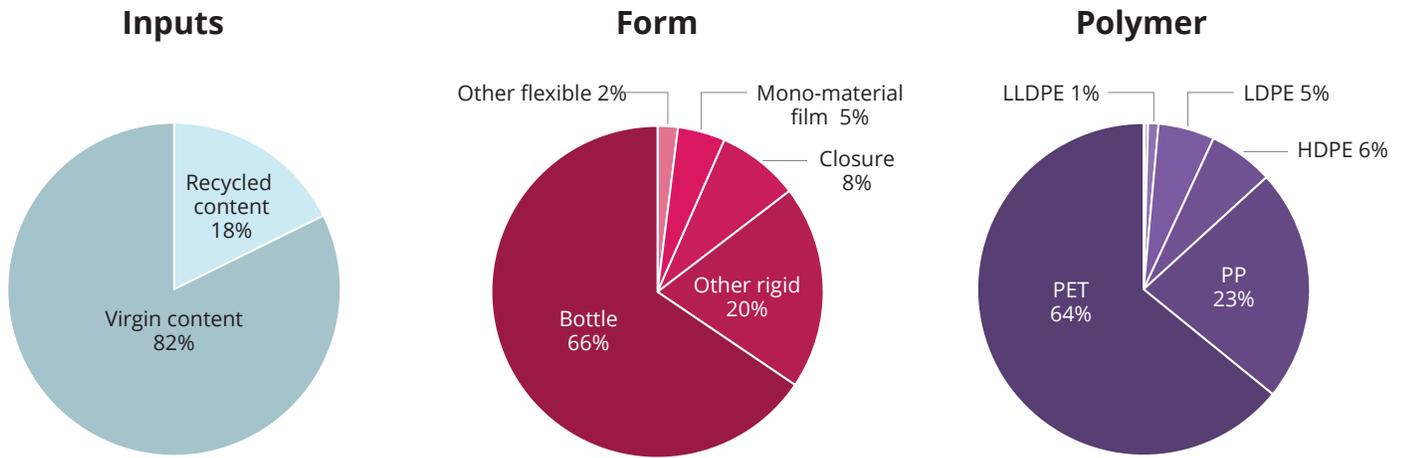
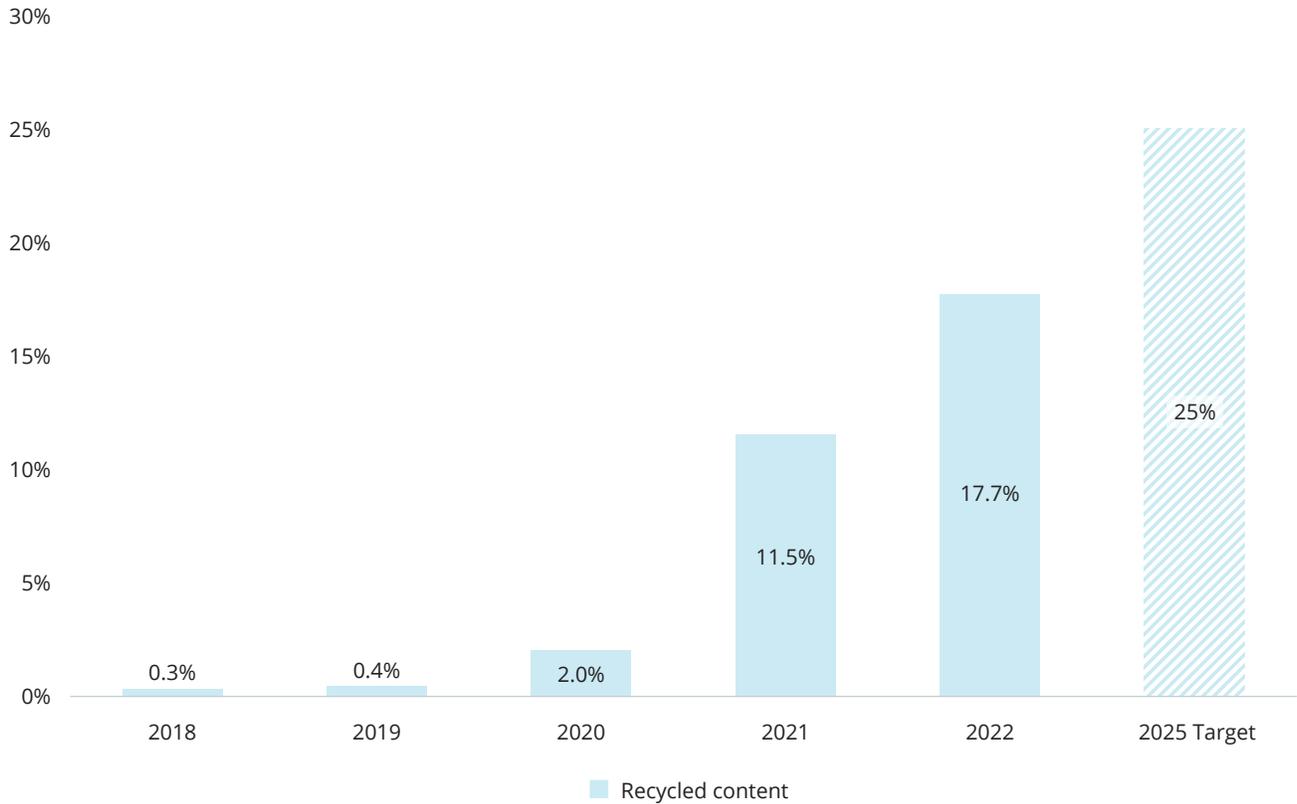


FIGURE 17. Use of post-consumer recycled content in Keurig Dr Pepper's plastic portfolio from 2018 to 2022.





Kimberly-Clark

The data provided by Kimberly-Clark cover the company's global consumer and professional products businesses, accounting for an estimated 95% of the company's operations. Secondary and tertiary packaging are included in the reported data. The company's feminine care primary product wrappers are out of scope for this assessment. The reported data cover the period January 1, 2022, through December 31, 2022.

Key changes to Kimberly-Clark's portfolio include:

- Kimberly-Clark's use of recycled content decreased from 3.1% in 2021 to 2.7% in 2022.
- LDPE mono-material film remains the largest category in the portfolio at 72.8%, but it decreased from 80.3% in 2021. PP other rigids increased from 3.1% to 13.3%.
- PET other flexibles make up the remaining 13.9% of the company's portfolio.

INSIGHTS ON KIMBERLY-CLARK'S PROGRESS

Kimberly-Clark focused on product design and innovation and advancing strategic partnerships to address its plastic footprint and reduce end-of-life waste. For example, in 2022 Kimberly-Clark replaced its traditional baby wipes base sheet, made from 70% cellulose fiber and 30% polypropylene, with a new 100% cellulose fiber material, resulting in the elimination of 350 metric tons of plastic annually. Additionally, the product packaging is made from recycle-ready flow wrap film with 30% post-consumer recycled content. Kimberly-Clark continued existing partnerships with a number of global organizations that focus on reducing diaper waste and diverting product waste streams.

Kimberly-Clark is commercializing reusable menstrual underwear and reusable swim diapers for babies, aiming to displace single-use products. The company does not have reuse programs for its packaging.

KIMBERLY-CLARK OVERVIEW AND GOALS

Kimberly-Clark is a global consumer packaged goods manufacturer that is known for its essential brands that include Huggies®, Kleenex®, Cottonelle®, Depend®, and Andrex®. Driven by the company's purpose to deliver Better Care for a Better World and its global ambition to uplift the lives of 1 billion people in vulnerable and underserved communities by 2030, Kimberly-Clark aspires to develop innovative materials and alternatives to traditional plastics while supporting the development of the circular economy.

The company's strategic focus includes three key areas: Packaging, Product, and Circular Systems. Kimberly-Clark is committed to reducing its plastics footprint by 50% by 2030 through reductions, renewables, and recycled substitutes, or by introducing reusable products or circular solutions. This is a

complex and challenging undertaking that requires incorporation of systems thinking, strategic partnerships, and collaboration from sourcing through to end-of-life. Five goals support this ambition:

- *100% of packaging will be reusable, recyclable, or compostable by 2025*
- *20% average recycled content across plastic packaging by 2025*
- *50% footprint reduction in new, fossil-fuel-based plastics by 2030 from a 2019 base year*
- *75% of material in products will be either biodegradable or recovered and recycled by 2030*
- *100% of manufacturing waste diverted from landfill to beneficial uses by the end of 2022*

FIGURE 18. Inputs, form, and polymer distribution of Kimberly-Clark's plastic portfolio in 2022.

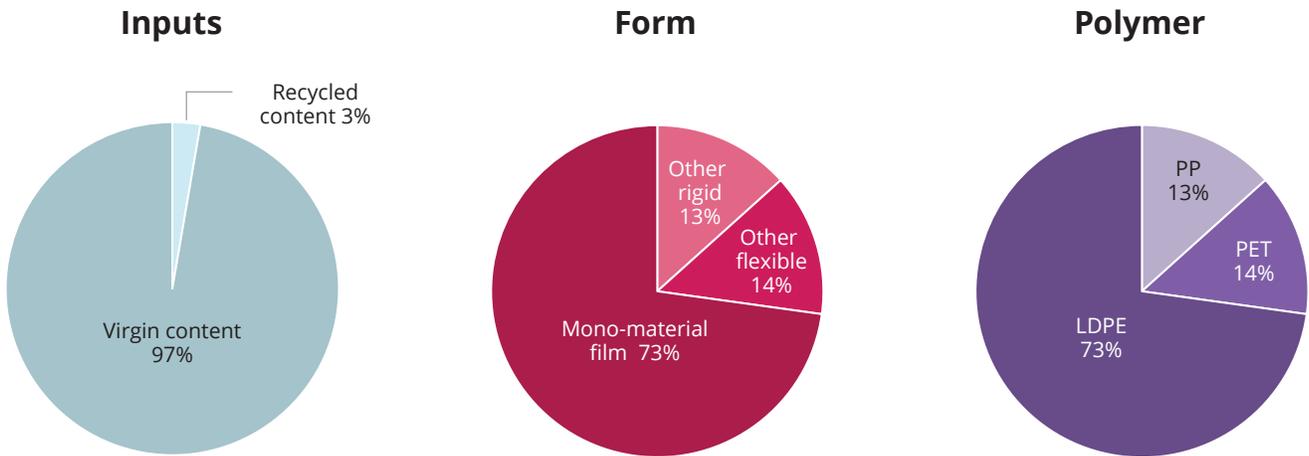
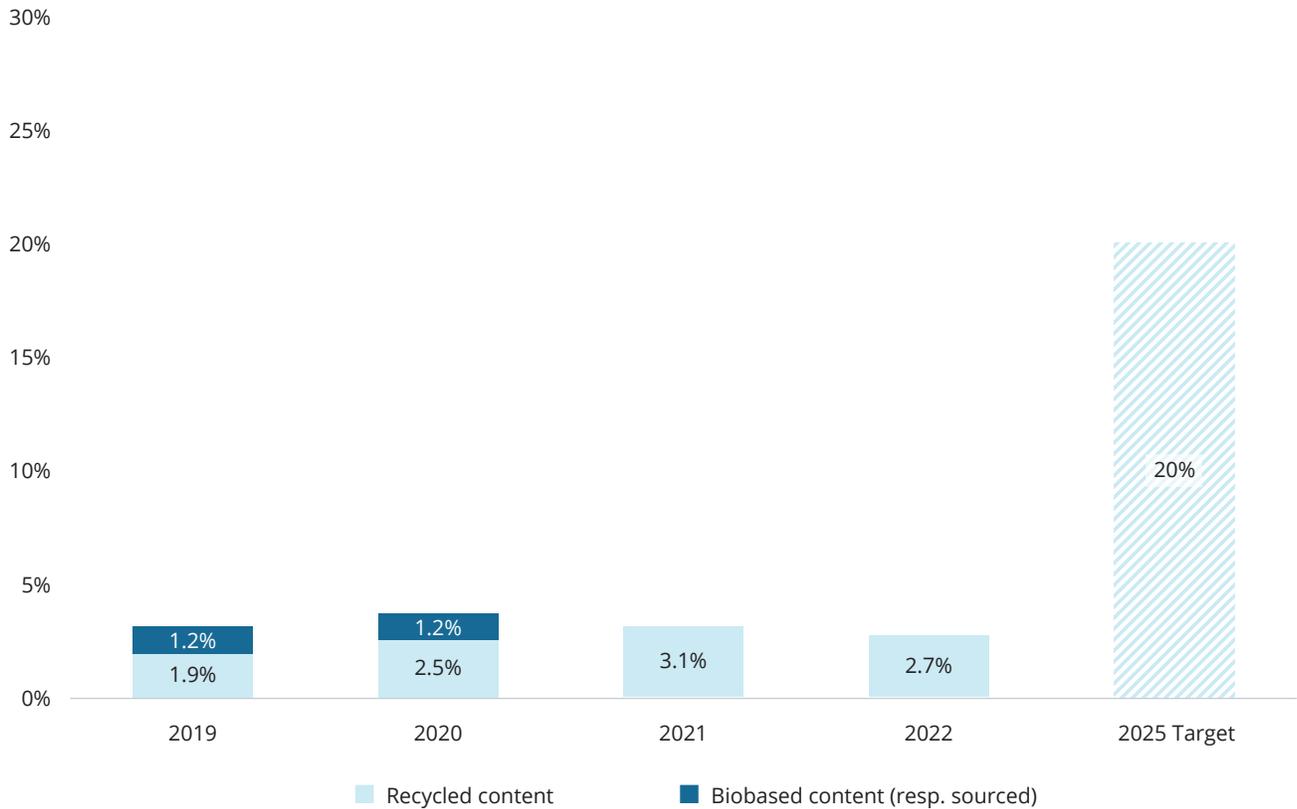


FIGURE 19. Use of sustainable inputs in Kimberly-Clark's plastic portfolio from 2019 to 2022.





McDonald's Corporation

The data provided by McDonald's Corporation cover consumer-facing primary plastic packaging in 22 countries representing more than 85% of the company's global plastic usage. Prepackaged items, operational packaging, transport packaging, and Happy Meal® toys are out of scope for this assessment. The reported data cover the period January 1, 2022, through December 31, 2022.

Key changes to McDonald's Corporation's portfolio include:

- McDonald's use of recycled content increased from 0.8% in 2021 to 1.3% in 2022, and biobased content increased from 2.0% in 2021 to 2.9% in 2022.
- Small plastics accounted for 7.3% of the portfolio in 2022. This is a decrease from 10.7% in 2021.
- Since eliminating polystyrene foam packaging in 2018, McDonald's has continued to reduce its use of non-foam rigid polystyrene, from 17.0% of the portfolio in 2021 to 16.1% in 2022.

INSIGHTS ON MCDONALD'S CORPORATION'S PROGRESS

McDonald's is focusing on removing virgin fossil fuel-based plastics and reducing small plastics, as well as prioritizing the redesign of packaging to utilize recycled plastic and to

be more recyclable. In 2022, many markets made efforts to reduce plastic by redesigning items such as switching to paper-based straws, deploying new McFlurry cups without plastic lids, and introducing salad boxes and cutlery made from renewable fiber. As McDonald's strives to meet its global goals, they are working with suppliers to test new technologies that can scale globally. The company also continued engagement in key partnerships to increase recycling and supply for recycled content. In 2022, more than 85% of restaurants in 21 markets¹² offered guests the opportunity to recycle packaging items. By the end of 2022, McDonald's was approximately 81% of the way toward its goal to source primary guest packaging from renewable, recycled, or certified sources by the end of 2025.

McDonald's is continuing to implement reusable tableware and reusable packaging across many markets, to comply with the relevant local reuse laws. For example, in 2022, McDonald's South Korea offered reusable cups for cold drinks nationwide to comply with legislative requirements and served approximately 25% of all dine-in beverage sales in reusables. In certain pilot markets around the world, including specific regions of Canada and Australia, McDonald's offers customers the opportunity to "Bring Your Own" cup.

MCDONALD'S CORPORATION OVERVIEW AND GOALS

With more than 40,000 locations in more than 100 countries, McDonald's is the world's leading global foodservice retailer. Approximately 95% of McDonald's restaurants worldwide are owned and operated by independent local business owners.

McDonald's purpose is to feed and foster communities, and the company is committed to protecting the planet for communities today and in the future. The company is driving climate action and accelerating circular solutions to help keep waste out of nature, including testing new packaging and recycling solutions around the globe to help reduce packaging, switching to more sustainable materials, and helping customers recycle. The majority of McDonald's global packaging portfolio by weight is sustainable fiber (78%), with the remaining comprised of plastics (22%).

In partnership with our Franchisees, suppliers, and producers, we're finding innovative ways to reduce emissions, help keep waste out of nature, and preserve natural resources. McDonald's uses its global scale to accelerate a circular economy and has made the following key commitments related to the data disclosed in this report:

1. *Source 100% of McDonald's primary guest packaging¹³ from renewable, recycled, or certified sources by 2025. This includes our 2020 interim goal to source 100% of primary fiber-based guest packaging from recycled or certified sources where no deforestation occurs, which was substantially achieved as of year-end 2020.*
2. *By the end of 2025, McDonald's will implement global and local solutions across its business to advance the reduction, reuse, or recycling of guest packaging and help create demand for recycled materials.*

FIGURE 20. Inputs, form, and polymer distribution of McDonald's plastic portfolio in 2022.

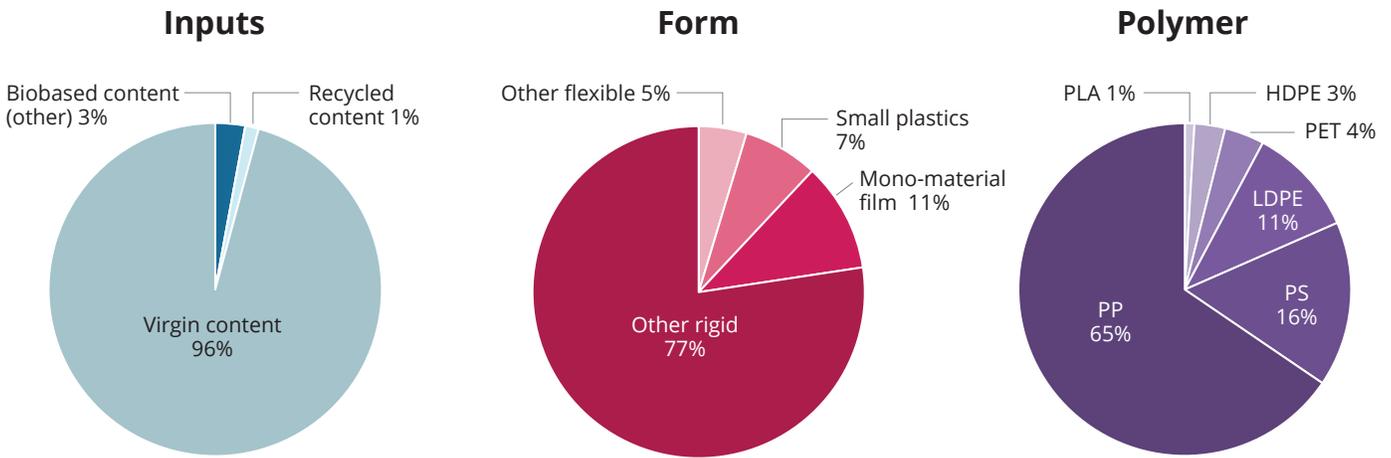
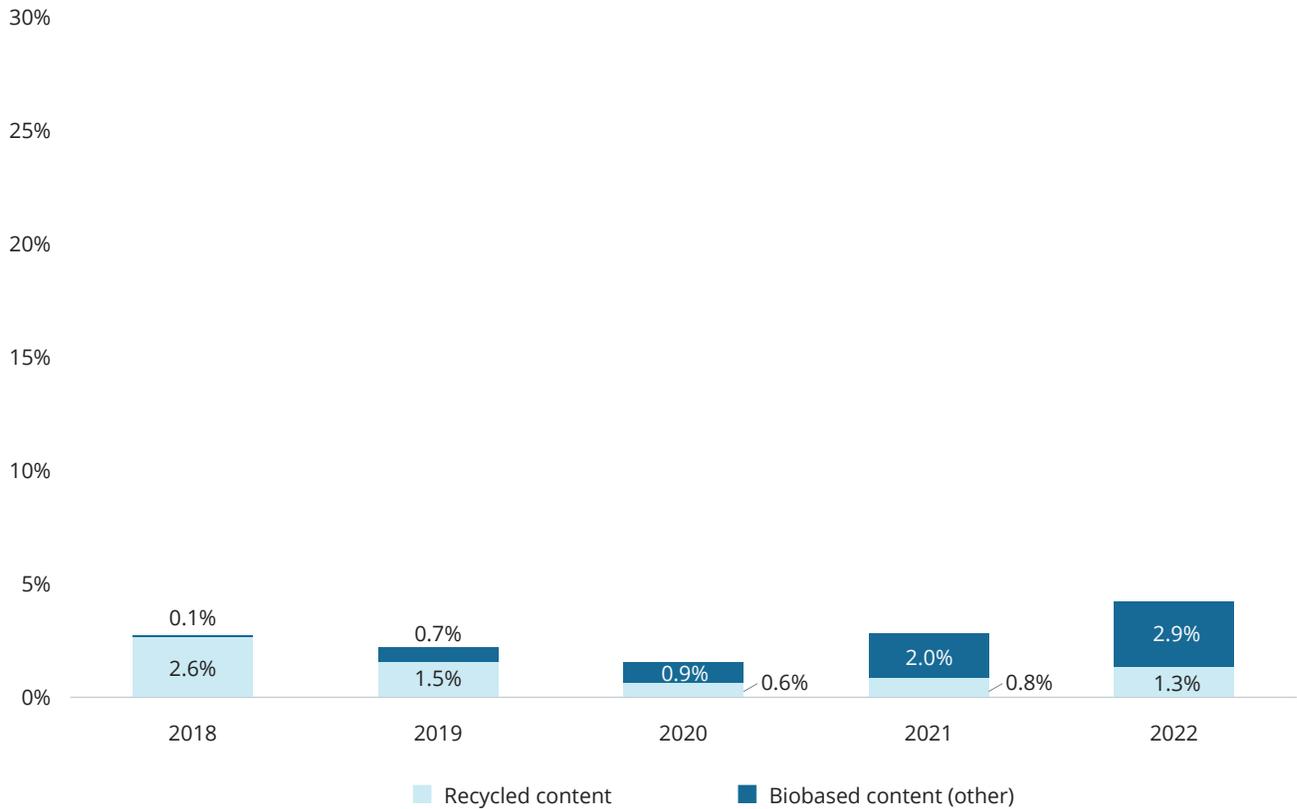


FIGURE 21. Use of sustainable inputs in McDonald's plastic portfolio from 2018 to 2022.





Procter & Gamble (P&G)

Since joining *ReSource*, P&G has provided data that cover the company's consumer-facing plastic packaging for countries in each region that total 80% of sales in the region. This approach enabled P&G to meet the country specific data reporting requirements of *ReSource* and participate in the report. A P&G analysis showed that the reported subset of data to *ReSource* is accurate, yet it does not fully represent the company's total plastic packaging portfolio or the progress achieved toward its packaging goals. The reporting also resulted in minor discrepancies in average PCR levels in the *ReSource* data subset and the P&G overall corporate results. For clarity and consistency, Figure 23 and Appendix B have been updated with the total percentage of recycled content in

the company's plastic packaging portfolio as reported in its annual Citizenship report for 2019–2021.

Over the next year, P&G will seek to find a solution that allows the company to submit its full portfolio data in the format required by *ReSource*. In the interim, P&G continues to publicly report data on total plastic packaging use and progress via its [ESG Portal](#) and in its Citizenship Report annually.

Secondary and tertiary packaging are out of scope for this assessment. The reported data cover the period July 1, 2021, through June 30, 2022.

PROCTER & GAMBLE OVERVIEW AND GOALS

P&G serves consumers around the world, with brands including Always®, Ambi Pur®, Ariel®, Bounty®, Charmin®, Crest®, Dawn®, Downy®, Fairy®, Febreze®, Gain®, Gillette®, Head & Shoulders®, Lenor®, Olay®, Oral-B®, Pampers®, Pantene®, SK-II®, Tide®, Vicks®, and Whisper®. P&G operates in approximately 70 countries worldwide.

At P&G we believe we can unlock more worth from packaging materials, long after their first use. We are inventing and partnering to help build a more circular future to reduce waste and reuse packaging and materials.

P&G's Ambition 2030 packaging goals include:

- *100% of our consumer packaging will be designed to be recyclable or reusable by 2030*
- *Decreasing our use of virgin petroleum plastic packaging by 50% compared to a 2017 baseline*

We're designing our product packaging with less plastic, more recycled content, alternative materials, and to be more easily recyclable. We integrate consumer research and scientific, lifecycle thinking about environmental impacts to guide our design decisions and material selection, from sourcing to next use. As we advance progress toward these goals, we are guided by three overarching principles:

- *Lifecycle Thinking: Plastic packaging can drive significant and meaningful benefits such as product protection, consumer safety, and GHG emission benefits. As we assess packaging material and design choices that drive greater circularity, we are careful to look at full life cycle implications to help guide our choices and avoid unintended consequences.*
- *Waste Management Hierarchy: We subscribe to the waste management hierarchy and seek to progress our efforts toward the higher-order and preferred solutions within the hierarchy, starting with source reduction and reuse.*
- *Collaboration: The challenge of plastic waste is bigger than any one company, and we believe collaboration across the value chain, civil society, and governments will be key to driving solutions at scale. That is one of the reasons why we joined ReSource: Plastic—it represents an opportunity to work with WWF and industry leaders seeking to drive reporting tools that can help better inform where strategic interventions are needed. We believe partnerships are critical to transform how packaging materials are used, reused, and renewed in a circular economy. Our innovation teams are developing alternative materials, new processing, and emerging forms that can reduce waste and deliver a lower environmental footprint across the entire product lifecycle.*

FIGURE 22. Inputs, form, and polymer distribution of P&G's plastic portfolio in 2022.

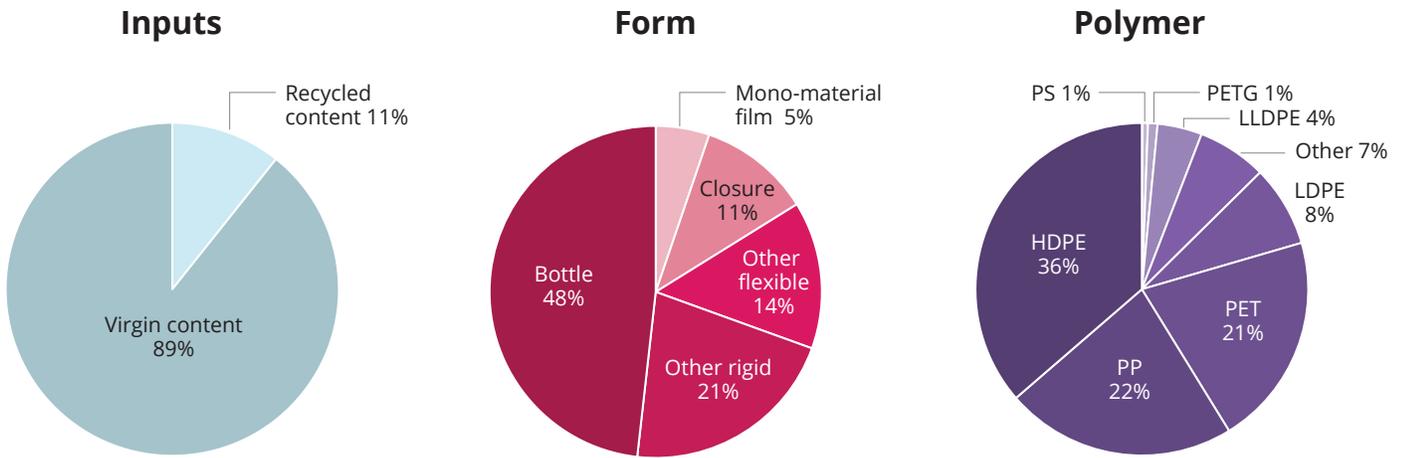
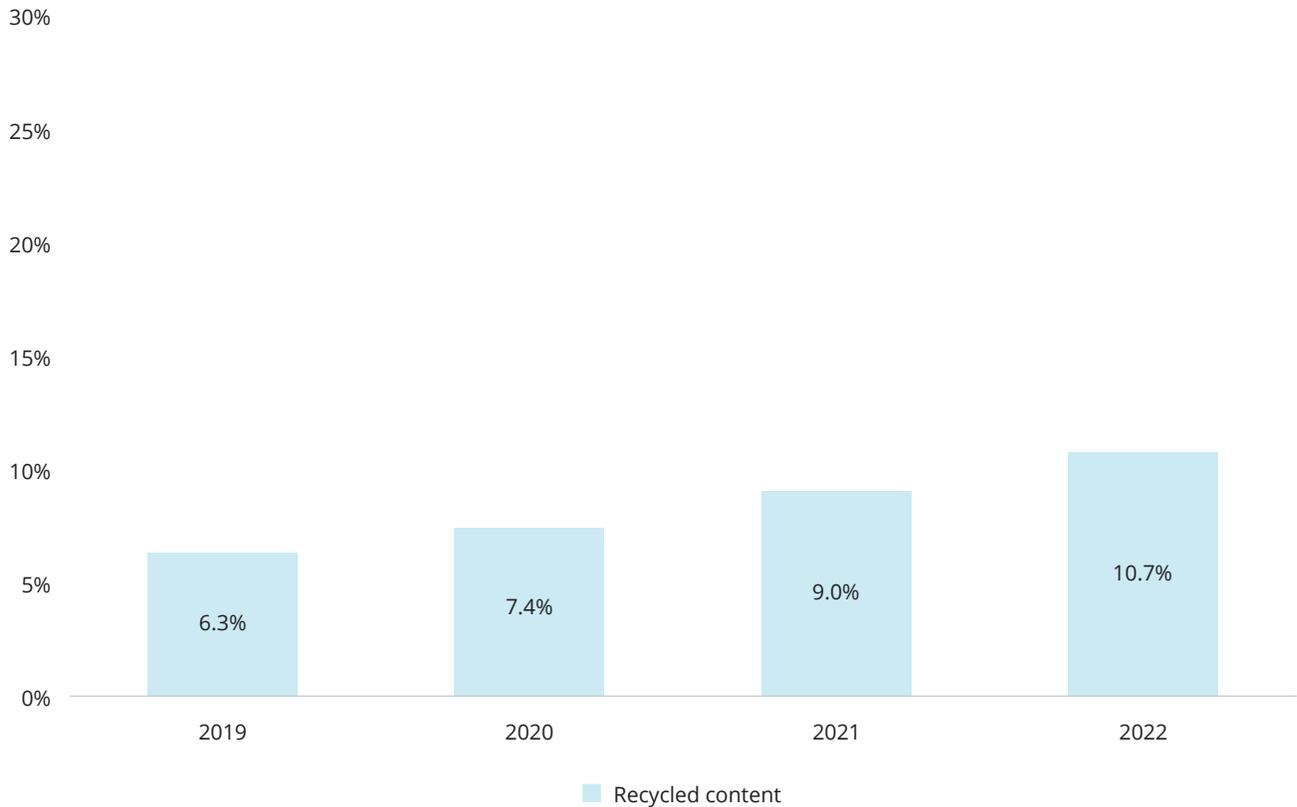


FIGURE 23. Use of post-consumer recycled content in P&G's plastic portfolio from 2019 to 2022.





Key changes to P&G's portfolio include:

- P&G's use of recycled content was 10.7% in 2022, based on the subset of data reported to *ReSource*. Based on P&G's total reported resin use, the company's average PCR content in 2022 was 12.4%.
- The share of bottles in the portfolio decreased from 56.1% in 2021 to 48.2% in 2022.
- Flexibles increased from 12.7% of the portfolio in 2021 to 19.6% in 2022, including an increase in mono-material films from 0.0% in 2021 to 5.2% in 2022.

INSIGHTS ON PROCTER & GAMBLE'S (P&G) PROGRESS

A continued focus for P&G has been designing consumer packaging to be recyclable at scale. The company's brands have glidepaths to redesign their currently non-recyclable packaging to materials and formats that will be recyclable

at scale. Shifting to sustainable inputs remains another priority, with P&G successfully executing the replacement of plastic tubs in Europe for Ariel single dose detergent and fabric conditioner beads with pulp-based boxes and packaging. The company continues to replace plastic blister packaging with pulp-based carton packaging for Gillette blades and razors across the globe. Currently P&G averages close to 30% recycled content in the EU with PET at levels close to 50% recycled resin.

On reuse, P&G's Home and Surface care have had success with reusable trigger bottles and triggerless bottle refills, such as Dawn Powerwash. The company also has several brands participating in a pilot with Loop to explore the return from home model. Alongside other companies, P&G is funding the initial work of the Consumer Goods Forum Refill & Reuse collaboration to define the cities, models, and product categories for scalable, industry-level solutions.



Starbucks Coffee Company

The data provided by Starbucks cover plastic from direct operations and retail stores globally, including licensed stores. Reporting includes secondary and tertiary packaging. The company's non-store operations and consumer packaged goods business are out of scope for this assessment. The reported data cover the period October 4, 2021, through October 2, 2022.

While Starbucks reported data for 2018, which is included in the aggregate *ReSource* data for that year, the company made significant improvements to its inventory methodology the following year and therefore uses 2019 as its baseline for tracking individual progress.

Key changes to Starbucks portfolio include:

- Recycled content increased from 4.6% in 2021 to 6.6% in 2022, and biobased content increased from 1.6% in 2021 to 4.8% in 2022.
- PP makes up the majority of Starbucks portfolio at 59.2%, up from 56.7% in 2021.
- The share of flexibles increased from 10.3% in 2021 to 14.8% in 2022.

INSIGHTS ON STARBUCKS PROGRESS

To shift to more sustainable inputs, Starbucks launched a new hot cup in 2022 with 30% post-consumer recycled content, 25% less plastic in the liner, FSC-certified fiber, and up to 7–9% lightweighted depending on cup size. This launched in 20% of Starbucks markets with a full rollout expected by early 2025. The company also transitioned to 100% rPET Ethos water bottles in the U.S. and Canada during the reporting period. As part of its commitment to help eliminate problematic or unnecessary packaging, Starbucks plans to eliminate PS, PVC, PVDC, and undetectable carbon black from its plastic packaging by 2025.

In 2022, Starbucks continued expanding its efforts to make reusable cups available and convenient for customers. The company piloted reusable or returnable cup programs through 20 tests globally. The company remains on track to meet its goal of ensuring customers have the option to use their own personal reusable cup for every Starbucks visit in the U.S. and Canada—including in café, drive-thru, and through mobile order and pay.

STARBUCKS OVERVIEW AND GOALS

Aligning with its organizational vision, Starbucks is looking ahead with a heightened sense of urgency and conviction that we must challenge ourselves, think bigger, and do much more in partnership with others to take care of the planet we share. In January 2020, we announced our commitment to pursue a bold, multi-decade aspiration to become resource positive and give more than we take from the planet.

Starbucks has set targets for 2030:

- *Carbon: 50% absolute reduction in scope 1, 2, and 3 greenhouse gas emissions representing all of Starbucks' direct operations and value chain from FY19 base year.*

- *Water: 50% of water withdrawal will be conserved or replenished across our direct operations, stores, packaging, and agricultural supply chain from FY19 base year.*
- *Waste: 50% reduction in waste sent to landfill from stores (including packaging that leaves stores) and direct operations from FY19 base year, driven by a broader shift toward a circular economy.*

This is an aspiration that we take on recognizing it will come with challenges and will require transformational change. We also know that leadership in sustainability takes commitment, investment, innovation, and partnership, and so we are excited to work with WWF and the ReSource: Plastic Members to reduce plastic waste.

FIGURE 24. Inputs, form, and polymer distribution of Starbucks plastic portfolio in 2022.

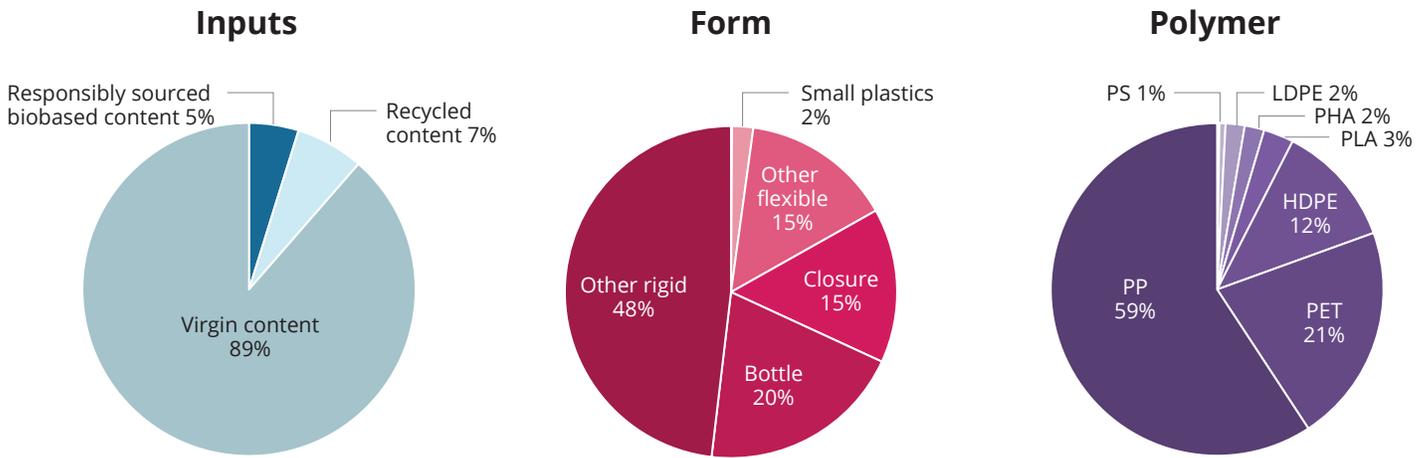
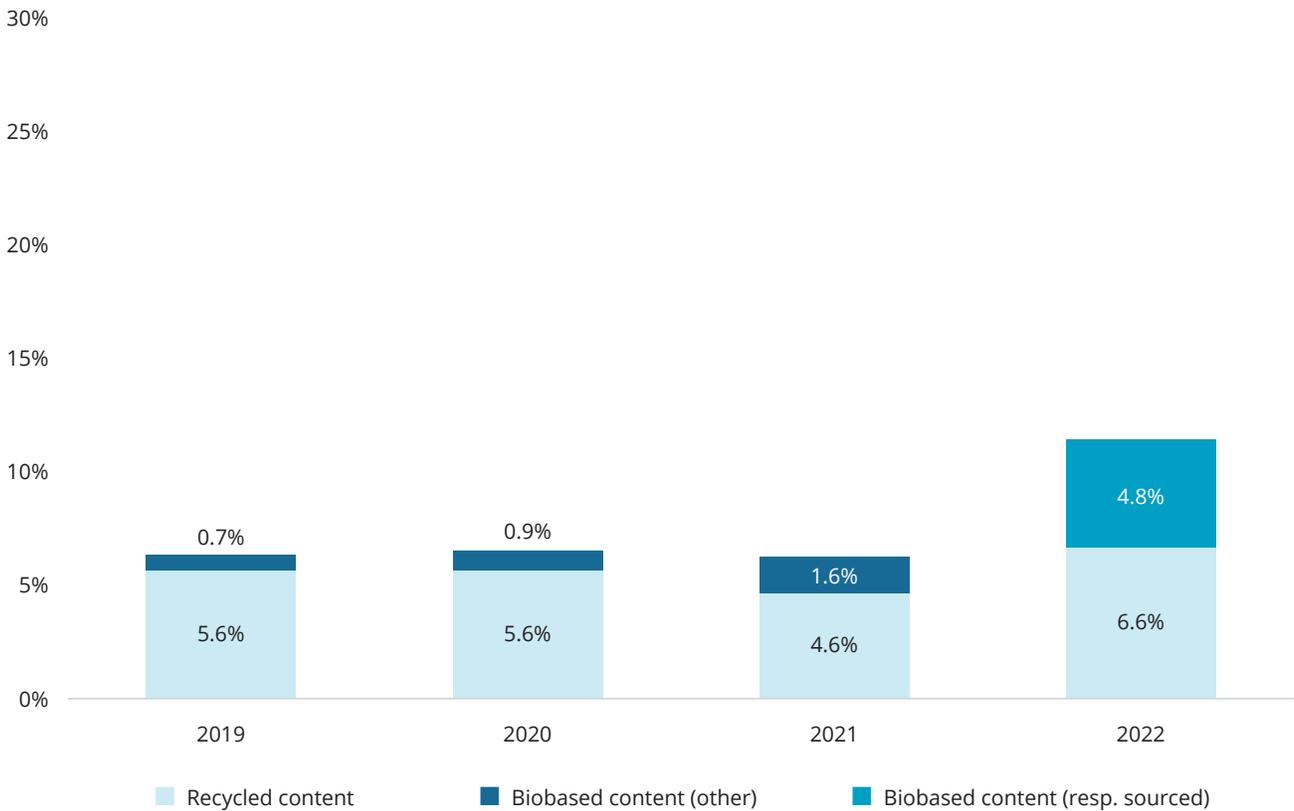


FIGURE 25. Use of sustainable inputs in Starbucks plastic portfolio from 2019 to 2022.



The Coca-Cola Company

The data provided by The Coca-Cola Company cover consumer-facing plastic packaging for all The Coca-Cola Company's operating units and franchise bottlers. Secondary packaging, tertiary packaging, beverage cartons, fountain cups, and packaging items with volumes over 3 liters or 3 kilograms are out of scope for this assessment. The reported data cover the period January 1, 2022, through December 31, 2022.

Key changes to The Coca-Cola Company's portfolio include:

- In 2022, 14.9% of The Coca-Cola Company's plastic portfolio was recycled content, an increase from 13.6% in 2021.
- PET bottles made up 99.9% of The Coca-Cola Company's plastic portfolio, a slight decrease from 2021.
- Flexibles, which consist of LDPE pouches, made up 0.1% of The Coca-Cola Company's plastic portfolio, a slight increase from 2021.

THE COCA-COLA COMPANY OVERVIEW AND GOALS

The Coca-Cola Company's vision of a World Without Waste guides their approach to this topic. The company works to reduce the impact of packaging waste on the environment through innovation and partnerships with bottling partners, NGOs, regulators, retailers, local communities, and competitors. The development of more complete data and metrics has been critical to advancing this work. In 2018, The Coca-Cola Company established three fundamental goals:

- 1. Make 100% of their consumer packaging recyclable globally by 2025*—and use at least 50% recycled material in their packaging by 2030.*
- 2. Collect and recycle a bottle or can for each one sold by 2030.*
- 3. Bring people together to support a healthy, debris-free environment.*

In 2021, The Coca-Cola Company added the goal to:

- 4. Reduce use of virgin plastic derived from non-renewable sources by a cumulative 3 million metric tons by 2025.*

In early 2022, The Coca-Cola Company announced an industry-leading goal to significantly boost its use of reusable packaging:

- 5. By 2030, the company aims to have at least 25% of all beverages globally by volume across its portfolio of brands sold in refillable/returnable glass or plastic bottles, or in refillable containers through traditional fountain or Coca-Cola Free-style dispensers.*

Underlying these goals is the need for more inclusive collection rates for all consumer packaging, stronger accounting of plastic packaging that reflects the breakdown of packaging by units sold, and the use of more inclusive metrics to drive progress toward stated goals.

* Includes select primary consumer packaging materials.

FIGURE 26. Inputs, form, and polymer distribution of The Coca-Cola Company's reported plastic portfolio in 2022.

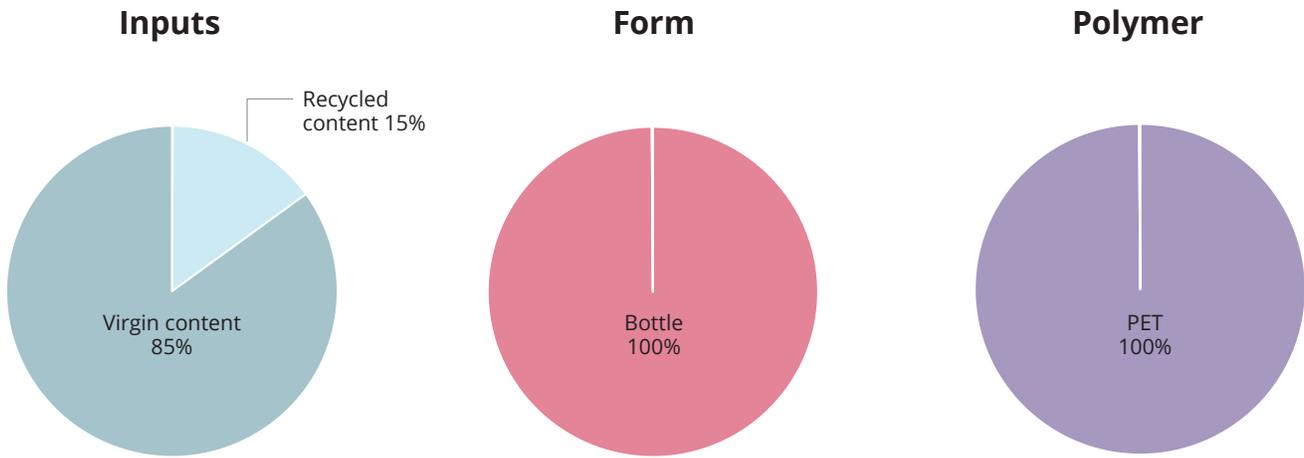
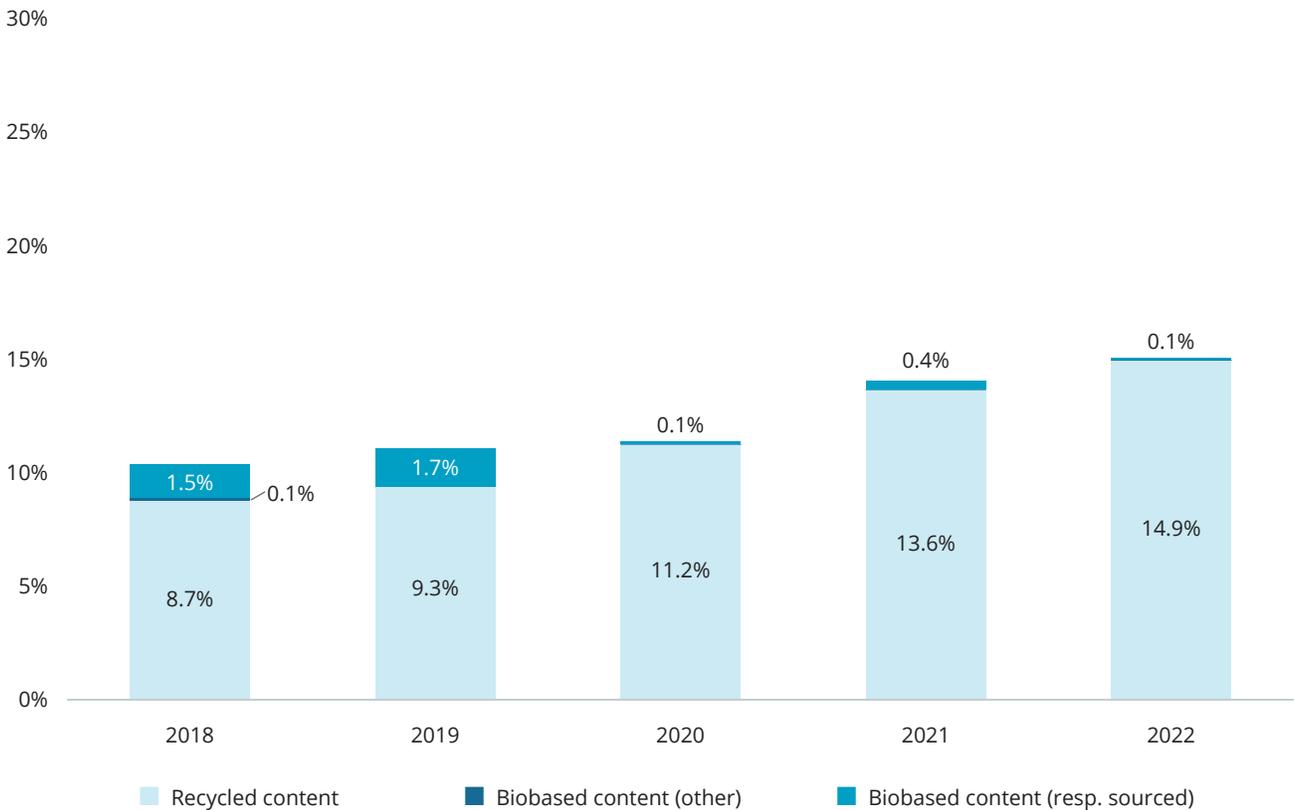


FIGURE 27. Use of sustainable inputs in The Coca-Cola Company's plastic portfolio from 2018 to 2022.



INSIGHTS ON THE COCA-COLA COMPANY'S PROGRESS

The Coca-Cola Company is investing in ways to innovate its packaging to help improve recyclability. The company has launched label-less bottles across a range of brands in Japan, South Korea, Switzerland, and China. Bottles with tethered caps, which enable bottles and caps to be more easily collected together for recycling, are being piloted for the company's entire portfolio in Germany, Bulgaria, and Italy. The company also continues to transition Sprite plastic bottles from green to clear PET, which is either completed or in process in over 100 countries. In 2022, The Coca-Cola Company began offering the majority of DASANI bottles in 100% rPET* plastic in the United States and Canada, launched 100% rPET* Coca-Cola bottles in Viet Nam, and achieved its goal of 50% recycled material use in Japan.

Last year, The Coca-Cola Company announced a global reusable packaging goal: by 2030 the company aims to have at least 25% of its beverages by volume sold in refillable/returnable glass or plastic bottles or in fountain dispensers with reusable packaging. Globally, The Coca-Cola Company continues to test and scale returnable glass bottle (RGB) and reusable PET pilot programs, including in parts of Europe, Latin America, South Africa, and parts of China. One example is in the United States, where a 500 ml RGB pilot program in approximately 100 retail and foodservice outlets in El Paso, Texas, generated a 75% return rate, encouraging the company to explore expansion capabilities in 2023.

* Excluding caps and labels.



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Maximize Recommendations for Action

Building on the findings from past years of reporting, this section reflects on the action taken between our inaugural report and now. As with previous *Transparent* reports, progress is uneven—yet the focal recommendations identified in years past remain largely relevant today. The following updates therefore intend to pull forward the most successful strategies and replicable results from the past four years of reporting, with the dual goals of informing future progress and applying key learnings that will maximize impact.

ELIMINATING UNNECESSARY PLASTIC THROUGH BUSINESS MODEL INNOVATION, REDUCTION, AND SUBSTITUTION

The elimination of unnecessary, single-use plastic is the most important action that companies can take to directly address the plastic pollution crisis through their own portfolios. This year, five *ReSource* Members had absolute increases in their total plastic use compared to their baseline, and four had absolute reductions. How this information should be interpreted is a complex question. Today, total volumes of plastic use are affected by macroeconomic influences (e.g., the COVID-19 pandemic) as well as sales growth or shrink. However, ultimately, it's important for companies to decouple their plastic use from their business growth and achieve absolute reductions in plastic. Therefore, it's difficult to draw concrete conclusions from total plastic volume alone. Considering additional measures, like reuse efforts, use of sustainable inputs, and design changes to eliminate problematic plastic can help create a more robust, but still imperfect, picture of progress on reduction efforts overall.

Problematic and Unnecessary Plastic

Previous *Transparent* reports have identified problematic and unnecessary plastics as a critical opportunity for companies to reduce their plastic tonnage, and this recommendation remains true moving forward. Problematic plastics are for the purposes of this report defined as polystyrene (PS), polyvinyl chloride (PVC), and small plastics less than 2 inches in two dimensions. They can contain hazardous chemicals, hinder or disrupt the recyclability or compostability of other items, and/or have a high likelihood of leaking into the environment—thus presenting a strategic target for companies to eliminate from their portfolios. Many of these plastics can also be considered unnecessary in that they can be avoided or replaced by alternative materials or reuse models while maintaining utility. Overall, *ReSource* Members have made progress to reduce problematic plastics—in 2018, these products made up 3.2% of Member portfolios, and by 2022 this percentage had been cut by more than half (to 1.2%). However, this progress slowed in the past two reporting years, as Members have already addressed the easiest and highest-volume problematic plastics in their portfolios. What remains in this category may require dedicated innovation, investment, or an overall system shift (e.g., to a different delivery model) to be fully addressed.

Realizing the Potential of Reuse

New business models such as reuse are a key opportunity to reduce overall plastic usage and create circular systems that deliver value to people and reduced impacts to nature. Scaling reuse is a transformative and high-impact but challenging strategy for businesses to deploy. All nine *ReSource* Members are currently exploring reuse models in some capacity, but many efforts are still limited to pilot scale. Breaking through this pilot phase to deliver permanent and scaled reuse systems is a key challenge across many sectors that must be addressed over the next five years.

This year, *ReSource* collected reporting information on reuse systems from Members for the first time. Overall, this is a complex topic that most Members were tackling for the first time, and as a result the collected information was less complete than in other areas. While this limits the insights that can be pulled from the information, it's worth reflecting on what was learned and what the process itself can provide insight on. A lesson learned from this process is that measuring reuse is easier in some sectors than others, especially when it comes to the critical measure of quantifying a reuse system's contribution to the overall portfolio. Beverage companies, for example, have the advantage of a clear functional unit or serving size that can be applied across their whole portfolio, and that offers a clear picture of the extent to which reuse systems contribute to their overall product delivery. Other sectors and those with more diverse portfolios face a more challenging puzzle when it comes to measurement. Colgate-Palmolive, for example, was able to report a quantitative number at the product-category level, which is a good place to start when a unifying, portfolio-wide metric is not easily determined. The Coca-Cola Company and Colgate-Palmolive were the only two *ReSource* Members to report quantitative metrics on reuse, with all other Members providing qualitative information on their offerings and pilots, and some Members, notably Starbucks, having done extensive work piloting reuse. The challenges experienced by companies in collecting and reporting data on reuse highlights the need for consistent guidance on reuse measurement approaches and metrics, such as those being developed through the World Economic Forum's Consumers Beyond Waste initiative, to ensure that reuse is being implemented effectively. Moving forward, we hope to see Member actions continue to move from piloting to deployment on reuse, and to see more quantitative information available at both the product category and portfolio levels.

SHIFTING TO SUSTAINABLE INPUTS FOR REMAINING PLASTIC

Increasing the use of recycled content is key to building circular systems for plastic and incentivizing its collection and recycling. Among *ReSource* Members, the use of recycled content has increased from 10.2% of the aggregate portfolio in 2021 to 12.0% in 2022. Some Members made significant strides to drive this increase, especially those well positioned to take advantage of the high recycling rates of PET bottles; notably, Keurig Dr Pepper's individual use of post-consumer recycled content reached 17.7% in 2022, helped by the conversion of all Core Hydration and 16-ounce Snapple products to bottles made from 100% recycled PET. Similarly, the Coca-Cola Company also grew its share of recycled content to 14.9% by offering the majority of DASANI bottles in 100% recycled PET* plastic in the U.S. and Canada and launching 100% recycled PET* Coca-Cola bottles in Viet Nam.

As outlined in previous reports, the availability of recycled materials does not match the demand set by companies to meet their sustainability goals. Addressing the incentive structure keeping virgin fossil-based plastic inexpensive and easier to source remains a key barrier to progress and will require action beyond corporate actors. Despite limited supply, there are still several ways for companies to make progress, including allocating a budget to pay a premium for recycled content, including PCR in internal performance targets, and engaging with governments on policies that will improve recycling rates and access to recycled content.¹⁴ Collaborative efforts across key markets and on specific materials are beginning to impact availability of recycled material, providing a proof point for this work's value in reaching recycled content goals.

Meanwhile, biobased content continues to make up less than one percent of Members' portfolios. The latest 2022 data shows biobased content comprised 0.3% of overall plastic footprint, only a marginal increase from 0.2% in 2021. However, 21% of all small plastics (such as straws, utensils, and coffee stirrers) reported in 2022 were made from biobased content, primarily PHA, and were also compostable. This statistic could imply that when companies have been unable to eliminate the use of their small plastics, they are instead shifting to sustainable inputs to make these products.

* Excluding caps and labels.

Overall, the factors contributing to the slow growth in the use of biobased content remain the same as in previous years. It is largely due to fluctuations in the price and availability of biobased materials and influenced by the lead time necessary to bring innovations into production. Responsibly sourced biobased plastic is important to the long-term strategies of several *ReSource* Members; notably, biobased plastic has a role to play in applications where there is not currently a clear path to be able to use recycled content. It will also be critical in instances when the properties of a novel biobased plastic are advantageous—for example, when a package would not be able to be recycled because of product contamination but could be composted. However, biobased and compostable plastics, like all materials, need to be paired with proper infrastructure, and currently industrial composting facilities that accept compostable plastics are not available in much of the world.

DOUBLING GLOBAL RECYCLING AND COMPOSTING OF PLASTIC

Although the overall category of problematic plastic use decreased in the 2022 reporting year, the volumes of some hard-to-recycle polymers like PVC and PS did increase between 2021 and 2022. While expanded polystyrene (EPS) has been virtually eliminated across all *ReSource* Members, rigid PS accounts for about 1% of the total portfolio and the majority of remaining problematic plastics. Eliminating hard-to-recycle polymers and components is important for aligning portfolios with the anticipated future conditions of waste management systems, bringing together design changes and broader systems changes to achieve a common vision for a future material system.

ReSource Members remain engaged in many collective action efforts to scale collection and recycling of plastic, varying with each Member's portfolio—matching the formats, geographies, and polymers that are most relevant to them.

Increasing recycling of PP is an important priority for several *ReSource* Members. Since its launch, the Polypropylene Recycling Coalition, led by The Recycling Partnership and funded by *ReSource* Members Keurig Dr Pepper and Procter & Gamble and members of the

NextGen Consortium, including McDonald's, Starbucks, and The Coca-Cola Company, has awarded grants to 41 recycling facilities, increasing the amount of PP recovered in the U.S. by an estimated 42 million pounds annually, and improved access to polypropylene recycling for over 34 million Americans.

Another initiative to increase recycling in the U.S. focuses on PET bottles, the most common item in the *ReSource* Members' aggregate plastic footprint. *ReSource* has engaged with the American Beverage Association (ABA), which is strengthening community recycling programs through its Every Bottle Back initiative to increase the collection of PET bottles and decrease the industry's use of virgin fossil-based plastic. The Every Bottle Back initiative is investing in improved recycling infrastructure and consumer education in key areas of the country, with commitments to 42 communities to date that are projected to yield 770 million more pounds of PET over 10 years.

Collective action on composting systems has advanced in recent years but remains less mature than on recycling, and the role of composting in addressing packaging waste is coming into sharper focus. Two collaborations in the U.S. have driven advancements: Closed Loop Partners' Composting Consortium and the U.S. Plastics Pact's composting workstream. In 2023, Closed Loop Partners' Composting Consortium undertook a joint study with the Biodegradable Products Institute, [Unpacking Labeling and Design: U.S. Consumer Perception of Compostable Packaging](#), which offers data on U.S. consumer perceptions of compostable packaging, along with a complementary policy brief with recommendations on compostable packaging for U.S. policymakers.¹⁵ The Composting Consortium continues to identify priority steps to create a more resilient composting system in the U.S. by working with the composting industry, consumer goods manufacturers, brands and retailers, environmental groups, and academics to pilot industry-wide solutions and build a roadmap for investment in technologies and infrastructure that enable the recovery of compostable food packaging and food scraps. The U.S. Plastics Pact's composting workstream is developing forthcoming guidance on the design of compostable packaging to ensure that compostable items brought to market align with the developing organics collection and processing system in the U.S.

DATA IMPROVEMENT AND HARMONIZATION

After four years of data collection, *ReSource: Plastic* is uniquely positioned to share key learnings on what does and does not work in plastic footprint reporting. Repetition over several years of reporting allows us to both recognize patterns in the data and isolate any irregularities, thus improving the analysis quality year over year. By better understanding the story that the numbers tell—with consideration to both the major reductions and increases, but also the smaller details in between—we can identify both progress drivers and barriers that *ReSource* Members face and provide recommendations informed by data.

Corporate Plastic Footprint

Overall, progress is uneven, and several conflating factors have complicated the way we interpret the data. Most notably, the COVID-19 pandemic has had a profound impact on not just *ReSource* Member companies but companies around the globe, thus complicating our ability to measure the success of *ReSource* interventions against a rebounding economy. *ReSource* has tried to deploy additional contextual analysis, such as normalization factors, to better interpret plastic footprint information and parse what effects are caused by broad economic conditions versus targeted sustainability efforts. Such measures have proven to be helpful in a limited way, but they are not sufficient to draw clear conclusions, and they require that subjective choices be made about what factor is most relevant to refer to. Further alignment around normalization factors or other metrics to help interpret the degree to which companies are making progress in overall plastic reduction efforts is needed.

It is important to recognize that there can be large differences in the amount of time it takes for various types of interventions to show up in the reported data. Design changes undertaken by a company can be reflected in the data within a year or two, but collaborative efforts focused on changing the broader system will take longer, such as ABA's Every Bottle Back initiative or The Recycling Partnership's Polypropylene Recycling Coalition leading to more recycled content showing up in companies' portfolios. Similarly, it can take a long time for improvements in country-level waste management systems to be reflected in our model results, as there is often a lag of multiple years between when these data

are collected and when they are published. For these reasons, it is important that disclosure frameworks collect not only quantitative data on companies' current portfolios but also qualitative information about longer-term and potentially more impactful investments they are making that may take time to show results.

Improvement in the quality of reporting from year to year is also a confounding factor—as data collection becomes more sophisticated and companies gain more experience in the nuances of reporting, it is inevitable that more plastic is found to be counted. While additional contextualization may be needed to properly read how this impacts the larger picture, this data still holds inherent value to help us understand more specific trends, such as the increase of sustainable inputs or the reduction of problematic plastics.

Therefore, as reporting becomes more common and widespread, we postulate that it will be common for companies' plastic volumes to show an increase between the first few years of reporting, because of increasing comprehensiveness of reporting data. It's important to be able to separate changes caused by reporting improvements (e.g., plastic volume that was always in existence but that was not previously counted) from true increases in plastic use, and to update baseline information accordingly. This means that reporting systems should account for this need and provide the tools and options necessary to easily parse this information and update baselines. Indeed, in *ReSource* we have already encountered Members' needing to update their baseline year of reference because of this issue.

Waste Management Data

Availability of consistent and reliable waste management data remains a limitation to drawing insights from reporting results. Without good polymer- and form-specific data in the markets in which they operate, it is difficult for companies to know how to select or design the packaging options that are best suited for local infrastructure. Without waste management data that are updated and published in a timely manner, it is challenging to know whether collective action efforts are having the desired effect. However, more datasets are slowly becoming available, such as through the Plastic Footprint Network, and mandatory national reporting on waste flows and leakage under the forthcoming global treaty would be a major step in ensuring consistent and reliable data.¹⁶

These learnings can be applied to accelerate progress toward more standardized reporting. Accurate, harmonized measurement is critical to understanding, and thus solving, the plastic pollution crisis. Previously, *ReSource* has called for collaboration to fill key data gaps and improve data confidence levels. As the list of stakeholders interested in understanding the state of the plastic waste crisis expands to include investors, financial institutions, and policymakers, this call to action is more relevant than ever. Since last year, key collaborations on this topic have been launched that have the potential to greatly advance progress on this topic, as discussed in the next section.



@ naturepl.com / Sue Daly / WWF



Multiply Collaborating for Change

ReSource aims to multiply impact by strategically aligning and converging efforts across platforms to match action to the scale of the plastic waste crisis. Since the publication of *Transparent 2020*, *ReSource* has aligned with several key initiatives to harmonize efforts and drive scale, prioritizing issues identified as needing collective action to overcome barriers to change.

SCALING MEASUREMENT AND DISCLOSURE

An exciting development for harmonized measurement this year is the expansion of CDP's environmental disclosure platform to include plastics through the Scaling Plastics Disclosure initiative in partnership with The Pew Charitable Trusts, Minderoo Foundation, and the Ellen MacArthur Foundation. On behalf of their 740+ investor signatories worth US\$136 trillion in assets, CDP requested nearly 7,000 companies across all sectors and regions to disclose information about their plastic-related targets, activities, risk exposure, and impacts.¹⁷

WWF has recently joined the Steering Committee of the Scaling Plastics Disclosure initiative and will use the experience gained through *ReSource: Plastic* to inform the continued development and expansion of CDP's plastic questionnaire. *ReSource* Members have committed to providing feedback to continue to develop the survey questions, metrics, and guidance given their leadership and experience in corporate plastic disclosure. As the CDP questionnaire becomes increasingly robust and comprehensive, our intent is for it to replace the mandatory annual reporting for *ReSource* Members that currently occurs through the ReSource Footprint Tracker.

Alignment around a standardized corporate reporting process on plastic is something *ReSource* has been working toward since its inception, and CDP's platform has the ability to reach the number of companies that is needed to address the scale of the problem. With over 20,000 organizations worth half of global market capitalization already disclosing environmental data through its platform, CDP plastic disclosure will rapidly scale plastic-related disclosure across the global economy and reduce the reporting burden for companies.

For corporate plastic disclosure to drive meaningful action to address plastic pollution, companies need to report not only on how much and what kinds of plastic they are putting on the market but also on the resulting waste and leakage that is being generated. This requires the development of accounting methodologies, analogous to the GHG Protocol for quantifying and reporting on GHG emissions, to enable companies to report on the waste management outcomes of their plastic waste in a credible way. The ReSource Footprint Tracker offers one such methodology, and WWF is actively participating in the Plastic Footprint Network (PFN), led by EA – Earth Action, to drive alignment around and more widespread use of data and methodologies for assessing plastic fate and leakage.

As additional reporting efforts arise, it is critical that they build upon existing work to create convergence and alignment rather than duplicating efforts and/or proliferating methods that may not be compatible with one another. Building on current work avoids costly duplication, leverages the learnings from leaders and early adopters, and provides value and feasibility proof points to those being asked to participate in these systems.

POLICY AND REGULATION

Implementation of effective policy is one of the most important levers to transform our material system, and advocacy for effective policy is emerging as a key strategy to overcome the inertia of the status quo and change incentives in a way that enables transformational change. It has become increasingly clear that companies will need to pull this lever to be able to meet ambitious sustainability goals on plastic. Furthermore, as momentum builds at both the international and national levels around policy and regulation, there is a need to participate in and prepare for changed requirements and incentives.

In 2022, the United Nations voted in favor of a legally binding resolution to address plastic pollution that is being drafted on an accelerated timeline and expected to be enacted in 2025. This global treaty is an unprecedented opportunity for systemic transformation in the fight against plastic pollution. An agreement of this stature could set important high-level frameworks for national level reporting and disclosures, drive innovation and infrastructure development, and coordinate collective action from countries around the world. A legally binding treaty would also help companies advance their sustainability commitments by driving the broader system change that companies cannot undertake on their own. Existing voluntary efforts are constrained by the dominance of a broken system and uneven playing field where only leaders take action. The frameworks set out by a treaty could enable new conditions that would allow these existing voluntary initiatives to be more successful—paving the way for companies to set the bar of action even higher and mobilizing additional actors through mandatory measures. As the United Nations currently undergoes negotiations through 2024 that will determine what will and will not fall into the treaty's scope, now is the time for all stakeholders to advocate for an ambitious and practical agreement that both meets the level of ambition needed to address the plastic crisis at scale and can be executed in alignment with existing sustainability goals. To be successful, the final treaty must target the plastics that are either most prone to leaking into nature or cause the most harm once leaked, such as microplastics, single-use plastics, and discarded fishing nets (i.e., ghost gear).¹⁸ WWF is calling on businesses to

join this call to action, leveraging their immense influence to demonstrate that the corporate world is committed to realizing a world without plastic in nature. In 2022, WWF convened the [Business Coalition for a Global Plastics Treaty](#) in partnership with the Ellen MacArthur Foundation. This coalition continues to bring together more than 100 businesses and financial institutions in advocacy for an ambitious final treaty that will deliver the level of impact our planet needs.

The need for engagement and advocacy on plastic policy is echoed on the national and regional scale as well. In the European Union, the Proposal on Packaging and Packaging Waste (PPWR) is poised to change both requirements and incentives, and in the United States, extended producer responsibility (EPR) is being considered in several states. Both have the potential to realign embedded barriers to change that have been entrenched for decades. Engagement and advocacy are needed to realize national policies that result in reduced plastic waste and avoid trade-offs in order to deliver environmental and social benefits while maintaining economic viability of solutions.

In March 2023, WWF hosted the inaugural Plastic Policy Summit, convening representatives from companies, NGOs, and local, state, and federal governments to develop a plan of action for advancing a circular future in the U.S.—the major takeaways from this event were subsequently published in the June 2023 report [Plastic Policy Summit: Outcomes and Actions](#). The summit elaborated on the work of WWF's OneSource Coalition, which is supported by a group of signatories that advocate for principles of national extended producer responsibility, environmental justice, and international leadership to reimagine our linear economies.

VOLUNTARY COLLECTIVE ACTION

Beyond policy, *ReSource* continues to leverage the ReSource Footprint Tracker within the U.S. Plastics Pact to scale transparent and consistent measurement of plastic packaging across the United States. The U.S. Plastics Pact remains focused on bringing together stakeholders across the value chain to implement solutions that help ensure that plastic packaging can be reused, refilled, recycled, or composted and to shift the

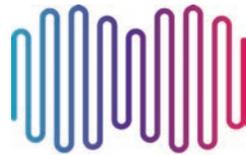
nation toward a circular economy. The ReSource Footprint Tracker is being used as the U.S. Plastics Pact's measurement tool for annual progress tracking of its more than 100 organizations, setting a path forward to meet four ambitious targets by 2025. In early 2023, the Pact released its second annual report, measuring progress against these targets. Beginning in 2022, the ReSource Footprint Tracker has also been employed by the Canada Plastics Pact to measure year-over-year progress for all Canada Plastics Pact Partners, broadening the Tracker's uptake and increasing harmonization of reporting metrics across North America.

ReSource is committed to advancing the uptake of reuse through key collaborations, such as the [Reuse Portal](#), which was publicly launched in May 2023. Facilitated by the Global Plastic Action Partnership, the Reuse Portal is a one-stop-shop collaboration platform that aims to scale reuse solutions that address plastic pollution, providing practical guidance, tools, and networks to businesses, policymakers, activists, and citizens. *ReSource* also collaborates with Consumers Beyond Waste (CBW), which works to advance more responsible models of consumption for the benefit of business and society. As noted earlier, evaluating the success of reuse is challenging, as there is currently no consensus on how to measure, account for, or report on reusable packaging. CBW is committed to developing a reuse accounting framework, which will help companies understand the impacts of reuse systems on their packaging portfolios and measure progress toward sustainability goals.

ReSource continues to hold a thought leadership partnership with the Bioplastic Feedstock Alliance (BFA), which enables *ReSource* to benefit from the BFA's existing work to bring a science-based perspective to the sourcing of biobased plastic and its role in circular systems. The BFA's *Methodology for the Assessment of Bioplastic Feedstocks* was updated in February 2022 to reflect updated science, integrate a climate resilience lens, and ensure the methodology is applicable to emerging bioplastic feedstocks.



Conclusion



As the fourth installment of *ReSource's* public report and the third progress report for our Principal Members, *Transparent 2023* is a proof point for the value of measurement in effectively addressing the plastic waste crisis and a call to action for more collaboration to scale impact. While the results of *Transparent 2023* highlight the significant impact that companies can have when they work to make changes within their own portfolios, they also prove the need for larger systemic change. Collaborative action has moved the needle for targeted interventions, but larger enabling frameworks will be needed to create global systemic change. To solve the plastic pollution crisis at the scope and scale that the planet needs, action must be taken to address the broken system that is at the root of the issue. By leveraging their immense influence, businesses can advocate for smart plastic policy on the national and global levels that will drive the necessary system change and allow their actions to have an even wider impact. In the meantime, companies should continue their internal work and begin designing their portfolios and business models in anticipation of a changing plastic landscape.

The United Nations took a historic step in March 2022, when 175 member states voted in favor of a legally binding global treaty to address plastic pollution. The next year of negotiations will determine the outcome of the final draft; thus, we face a critical window of opportunity to move the dial on plastic pollution. WWF calls on stakeholders from across the spectrum of the plastic crisis—including corporate leaders, small businesses, heads of state, federal representatives, and individual people around the world—to join us in the call for an ambitious treaty that will turn off the tap of plastic flowing into nature once and for all.

Glossary

Advanced Materials

Advanced materials are those that are sustainably produced, mitigate climate change, and reduce the risk of fossil depletion. This term typically captures future materials innovations that are currently in the design stage or at a very small scale. We align with the Roundtable for Sustainable Biomaterials' [Advanced Products Standard](#).

Bottle

A bottle is a form of rigid packaging having a comparatively narrow neck or mouth with a closure and usually no handle.

Source: *ISO 21067: 2007*

Closure

Closures include caps and closures that would be left on containers going to recycling. Caps/closures that would be disposed of separately from the primary container would fall under small plastics (problematic to recycle as separate components due to size).

Compostable

Packaging or a packaging component is compostable if it is in compliance with relevant international compostability standards and if its successful post-consumer collection, (sorting), and composting are proven to work in practice and at scale.

Source: *EMF Global Plastics Commitment*

Durable Goods

Durable goods are products with a life span of three years or more.

Source: *U.S. Environmental Protection Agency*

Mismanaged Waste

We follow the definition of mismanaged waste outlined by [Jambeck et al. \(2015\)](#): "material that is either littered or inadequately disposed." Mismanaged waste typically includes uncontrolled landfills and open dumps, waste that is not collected, and waste that is littered. Thus, this value is not how much plastic enters the ocean, but rather a potential volume that is not adequately managed and has the potential to enter ecosystems.

Mono-material Film

Mono-material film is a flexible material that contains only one polymer and no non-plastic materials and is not multilayered. It includes mono-material stretch and shrink films and mono-material film bags and sacks that are suited for recycling.

Shrink Film

Shrink film is a plastic material that shrinks in size when heated to conform to the item(s) packaged.

Source: *ISO 21067: 2016*

Stretch Wrap

Stretch wrap is a material that elongates when applied under tension and which, through elastic recovery, conforms to item(s) packaged.

Source: *ISO 21067:2016*

Other Flexible

Other flexible includes multi-material/laminate films.

Other Rigid

The "other rigid" category is used to capture rigids that are not classified as bottles, closures, foamed rigids, or small plastics.

Recyclable

Packaging or a packaging component is recyclable if its successful post-consumer collection, sorting, and recycling are proven to work in practice and at scale. A package is considered recyclable if its main packaging components, together representing greater than 95% of the entire packaging weight, are recyclable according to this definition, and if the remaining minor components are compatible with the recycling process and do not hinder the recyclability of the main components.

Source: *EMF Global Plastics Commitment*

Recycled Content

Recycled content is post-consumer recycled content and does not include pre-consumer recycled content.

- Post-consumer recycled content is defined as the proportion, by mass, of post-consumer recycled material in a product or packaging.
- Pre-consumer recycled content is defined as material diverted from the waste stream during a manufacturing process.

Source: *ISO 14021:2016*

Responsibly Sourced Biobased Content

Responsibly sourced biobased content, at a minimum:

1. Is legally sourced;
2. Is derived from renewable biomass and must pose no adverse impacts on food security;
3. Does not have negative impacts on land conversion, deforestation, or critical ecosystems; and
4. Provides environmental benefits.

Credible certifications such as the Roundtable on Sustainable Biomaterials certification can help ensure responsible sourcing. Together, we consider responsibly sourced biobased content and post-consumer recycled content as constituting sustainable plastic inputs.

Source: *Bioplastics Feedstock Alliance* (<https://bioplasticfeedstockalliance.org/>)

Rigid Foam

Forms under the “rigid foam” category include rigid products made from foamed polymers, typically polystyrene (PS).

Small Plastics

Small plastics are items smaller than 2 inches in two dimensions that require testing to determine the appropriate APR recyclability category.

Source: *The Association of Plastic Recyclers*

Sustainable Plastic Inputs

Sustainable plastic inputs as referred to throughout this report include recycled content, responsibly sourced biobased content, and advanced materials.

Unnecessary Plastic

Unnecessary plastic is plastic that, if not used, would not create adverse environmental or social trade-offs related to, for example, energy use, food waste, or quality of life.

Polymer Classification

List of Polymers for Single Use Plastics	Abbreviation
Acrylonitrile-butadiene-styrene copolymer	ABS
Ethylene vinyl alcohol	EVOH
High-density polyethylene	HDPE
Low-density polyethylene	LDPE
Linear low-density polyethylene	LLDPE
Nylon	Nylon
Other (specified in description)	Other
Polybutylene adipate terephthalate	PBAT
Polybutylene succinate	PBS
Polybutylene succinate adipate	PBSA
Polycarbonate	PC
Polyethylene furanoate	PEF
Polyethylene terephthalate	PET
Polyethylene terephthalate glycol	PETG
Polyhydroxyalkanoate	PHA
Polylactic acid	PLA
Polypropylene	PP
Polystyrene	PS
Polyvinyl chloride	PVC
Polyvinyl alcohol	PVOH

Appendix A

Normalization Factors

Most *ReSource* Members have chosen net sales or net revenues as their normalization factor, as this provides a standardized measure for tracking changes in a company's sales. However, using a revenue-based normalization factor has limitations in that it can be influenced by other factors that are unrelated to the amount of the company's product being sold. For instance, rising prices (i.e., inflation) or growth in business units that don't use plastic packaging could cause a

company's revenues to increase despite the amount of product being sold in plastic packaging remaining constant. Recent high rates of inflation could be one of the factors contributing to the negative normalized changes in tonnages. As of 2022, all seven Members using revenue-based normalization factors have had a reduction in their normalized tonnage relative to their baseline (Table A1).

TABLE A1. Changes in normalized total plastic tonnage since the baseline year for Members that reported normalization factors based on net sales/revenue. See Appendix B for additional details.

	2018	2019	2020	2021	2022
Amcor			Baseline	-11.3%	-19.8%
Colgate-Palmolive			Baseline	-8.7%	-17.4%
CVS Health				Baseline	-13.1%
Keurig Dr Pepper	Baseline	*	-4.4%	-7.3%	-15.2%
Kimberly-Clark		Baseline	-7.8%	-26.0%	-13.5%
Procter & Gamble		Baseline	-4.0%	-0.2%	-4.5%
Starbucks		Baseline	+2.2%	+3.5%	-5.2%

*Changes are calculated relative to 2019, as the normalization factor was unavailable for the baseline year.

McDonald's and The Coca-Cola Company use units of plastic packaging procured and number of plastic bottles sold as their normalization factors, respectively. Unit-based normalization factors are directly related to the amount of packaging used and thereby avoid the challenges previously noted with revenue-based normalization factors. However, given that they are effectively measuring the change in the average weight of plastic per unit of packaging, unit-based normalization factors are not able to account for many of the solution levers to address plastic waste such as elimination, substitution, or reuse. If a certain plastic item is

eliminated from a company's portfolio, both the normalization factor and the total tonnage would decrease, potentially leading to no change in the normalized tonnage. Eliminating its problematic small plastics could actually cause the average weight of a company's remaining plastic to increase, thereby leading to an increase in the normalized tonnage. Shifting to heavier reusable packaging would have a similar effect. As of 2022, both Members using unit-based normalization factors have had an increase in their normalized tonnage relative to their baseline (Table A2).

TABLE A2. Changes in normalized total plastic tonnage since the baseline year for Members that reported normalization factors based on units of packaging procured/sold. See Appendix B for additional details.

	2018	2019	2020	2021	2022
McDonald's	Baseline	*	+2.8%	+0.8%	+4.3%
The Coca-Cola Company	Baseline	+0.3%	+2.7%	+0.2%	+0.8%

*Changes are calculated relative to 2019, as the normalization factor was unavailable for the baseline year.

Appendix B

TABLES B1-10. Aggregate results and individual *ReSource* Members' results. Tonnages have been rounded to three significant figures.

	Aggregate	2018	2019	2020	2021	2022
Total tonnage		3,560,000	4,360,000	6,830,000	7,200,000	7,260,000
Companies reporting		4	6	8	9	9
Inputs	Recycled content	7.8%	7.9%	8.0%	10.2%	12.0%
	Biobased content (resp. sourced)	1.3%	1.3%	0.1%	0.2%	0.1%
	Biobased content (other)	0.2%	0.1%	0.3%	0.1%	0.2%
	Virgin content	90.7%	90.8%	91.6%	89.5%	87.8%
Form	Bottle	82.6%	82.1%	67.7%	70.2%	70.5%
	Closure	9.3%	3.9%	2.7%	1.5%	1.7%
	Mono-material film	0.5%	2.2%	3.8%	5.2%	4.6%
	Other flexible	0.6%	5.6%	17.6%	14.3%	13.8%
	Other rigid	5.9%	5.6%	7.8%	8.4%	9.1%
	Rigid foam	0.1%	0.0%	0.0%	0.0%	0.0%
	Small plastics	1.0%	0.7%	0.5%	0.5%	0.0%
Polymer	HDPE	5.8%	3.4%	4.9%	5.3%	5.5%
	LDPE	0.8%	6.1%	6.6%	14.5%	9.0%
	LLDPE	0.0%	0.0%	0.0%	0.0%	0.4%
	Other	0.1%	1.2%	13.2%	1.0%	7.7%
	PET	82.9%	80.1%	65.0%	69.2%	67.8%
	PETG	0.0%	0.5%	0.1%	0.1%	0.1%
	PHA	0.0%	0.0%	0.0%	0.0%	0.0%
	PLA	0.1%	0.0%	0.0%	0.1%	0.1%
	PP	7.6%	7.2%	9.2%	8.9%	8.3%
	PS	2.4%	1.5%	1.0%	0.9%	1.0%
	PVC	0.0%	0.0%	0.0%	0.0%	0.0%
Waste Management	Recycling	43.3%	42.2%	31.8%	33.5%	34.2%
	Incineration	6.6%	7.6%	9.2%	8.8%	8.8%
	Landfill	34.5%	34.6%	43.3%	42.6%	41.9%
	Mismanagement	15.6%	15.7%	15.7%	15.2%	15.2%

	Amcor	2020	2021	2022
Tonnage	Total tonnage	2,360,000	2,370,000	2,160,000
	Change in tonnage from 2020	-	+0.4%	-8.4%
	Normalization factor	\$12.9B net sales	\$14.5B net sales	\$14.7B net sales
	Normalized change in tonnage from 2020	-	-11.3%	-19.8%
Inputs	Recycled content	4.5%	5.6%	8.4%
	Biobased content (resp. sourced)	0.0%	0.0%	0.0%
	Biobased content (other)	0.9%	0.0%	0.2%
	Virgin content	94.6%	94.3%	91.5%
Form	Bottle	44.5%	46.0%	46.4%
	Closure	1.4%	0.6%	0.0%
	Mono-material film	6.4%	11.0%	9.0%
	Other flexible	42.7%	36.4%	37.5%
	Other rigid	4.4%	5.5%	7.1%
	Rigid foam	0.0%	0.0%	0.0%
	Small plastics	0.6%	0.6%	0.0%
Polymer	HDPE	2.3%	2.3%	2.2%
	LDPE	7.1%	32.8%	20.3%
	LLDPE	0.0%	0.0%	0.0%
	Other	36.0%	0.0%	22.1%
	PET	44.4%	55.1%	47.2%
	PETG	0.0%	0.0%	0.0%
	PHA	0.0%	0.0%	0.0%
	PLA	0.0%	0.0%	0.0%
	PP	8.7%	8.3%	6.3%
	PS	1.4%	1.4%	1.9%
	PVC	0.0%	0.0%	0.0%

	Colgate-Palmolive	2020	2021	2022
Tonnage	Total tonnage	289,000	279,000	260,000
	Change in tonnage from 2020	-	-3.4%	-9.9%
	Normalization factor	\$16.5B net sales	\$17.4B net sales	\$18.0B net sales
	Normalized change in tonnage from 2020	-	-8.7%	-17.4%
Inputs	Recycled content	10.5%	14.2%	14.7%
	Biobased content (resp. sourced)	0.0%	0.0%	0.0%
	Biobased content (other)	0.0%	0.0%	0.0%
	Virgin content	89.5%	85.8%	85.3%
Form	Bottle	51.6%	50.2%	46.1%
	Closure	10.4%	9.8%	1.3%
	Mono-material film	2.8%	3.9%	0.5%
	Other flexible	18.3%	15.9%	15.1%
	Other rigid	16.9%	20.3%	36.6%
	Rigid foam	0.0%	0.0%	0.0%
	Small plastics	0.0%	0.0%	0.0%
	Raw material	0.0%	0.0%	0.3%
Polymer	HDPE	22.0%	22.8%	23.7%
	LDPE	26.4%	27.5%	17.3%
	LLDPE	0.0%	0.0%	0.0%
	Other	3.6%	5.6%	14.8%
	PET	30.9%	29.0%	29.1%
	PETG	0.0%	0.0%	0.0%
	PHA	0.0%	0.0%	0.0%
	PLA	0.0%	0.0%	0.0%
	PP	16.8%	14.9%	14.9%
	PS	0.2%	0.2%	0.2%
	PVC	0.1%	0.0%	0.0%

	CVS Health	2021	2022
Tonnage	Total tonnage	12,100	11,600
	Change in tonnage from 2021	-	-4.0%
	Normalization factor	\$292.1B total revenues	\$322.5B total revenues
	Normalized change in tonnage from 2021	-	-13.1%
Inputs	Recycled content	1.6%	0.0%
	Biobased content (resp. sourced)	0.0%	0.0%
	Biobased content (other)	0.0%	0.0%
	Virgin content	98.4%	100.0%
Form	Bottle	71.9%	23.8%
	Closure	0.8%	0.8%
	Mono-material film	3.1%	1.9%
	Other flexible	3.5%	27.3%
	Other rigid	12.0%	46.2%
	Rigid foam	0.0%	0.0%
	Small plastics	1.8%	0.1%
	Raw material	6.9%	0.0%
Polymer	HDPE	19.1%	12.1%
	LDPE	3.2%	4.3%
	LLDPE	2.3%	0.1%
	Other	7.0%	1.9%
	PET	54.3%	40.5%
	PETG	0.2%	0.0%
	PHA	0.0%	0.0%
	PLA	0.0%	0.0%
	PP	12.5%	36.1%
	PS	0.4%	0.2%
PVC	1.1%	4.8%	

	Keurig Dr Pepper	2018	2019	2020	2021	2022
Tonnage	Total tonnage	208,000	230,000	230,000	243,000	247,000
	Change in tonnage from 2018	-	+10.4%	+10.3%	+16.7%	+18.4%
	Normalization factor	*	\$11.1B net sales	\$11.6B net sales	\$12.7B net sales	\$14.1B net sales
	Normalized change in tonnage from 2019	*	*	-4.4%	-7.3%	-15.2%
Inputs	Recycled content	0.3%	0.4%	2.0%	11.5%	17.7%
	Biobased content (resp. sourced)	0.0%	0.0%	0.0%	0.0%	0.0%
	Biobased content (other)	0.0%	0.0%	0.0%	0.0%	0.0%
	Virgin content	99.7%	99.6%	98.0%	88.5%	82.3%
Form	Bottle	72.8%	64.4%	68.1%	75.2%	65.5%
	Closure	4.3%	8.0%	6.6%	0.0%	8.0%
	Mono-material film	1.3%	0.5%	4.3%	3.6%	4.6%
	Other flexible	1.1%	5.7%	3.1%	1.2%	2.0%
	Other rigid	19.2%	21.4%	17.9%	20.0%	19.9%
	Rigid foam	0.0%	0.0%	0.0%	0.0%	0.0%
	Small plastics	1.3%	0.0%	0.0%	0.0%	0.0%
Polymer	HDPE	0.6%	2.2%	2.5%	2.5%	6.3%
	LDPE	1.2%	4.2%	5.4%	4.3%	5.5%
	LLDPE	0.4%	0.0%	0.0%	0.0%	1.0%
	Other	0.0%	0.5%	0.4%	1.7%	0.1%
	PET	73.6%	64.4%	68.1%	66.1%	64.1%
	PETG	0.1%	0.0%	0.0%	0.3%	0.3%
	PHA	0.0%	0.0%	0.0%	0.0%	0.0%
	PLA	0.0%	0.0%	0.0%	0.0%	0.0%
	PP	8.1%	18.2%	23.0%	25.0%	22.6%
	PS	16.0%	10.5%	0.6%	0.0%	0.0%
	PVC	0.0%	0.0%	0.0%	0.0%	0.0%

*2018 normalization factor unavailable due to 2018 merger between Keurig Green Mountain business and Dr Pepper Snapple Group.

	Kimberly-Clark	2019	2020	2021	2022
Tonnage	Total tonnage	111,000	106,000	86,000	105,000
	Change in tonnage from 2019	-	-4.3%	-22.1%	-5.4%
	Normalization factor	\$18.5B net sales	\$19.1B net sales	\$19.4B net sales	\$20.2B net sales
	Normalized change in tonnage from 2019	-	-7.8%	-26.0%	-13.5%
Inputs	Recycled content	1.9%	2.5%	3.1%	2.7%
	Biobased content (resp. sourced)	1.2%	1.2%	0.0%	0.0%
	Biobased content (other)	0.0%	0.0%	0.0%	0.0%
	Virgin content	97.0%	96.3%	96.9%	97.3%
Form	Bottle	9.5%	1.0%	0.7%	0.0%
	Closure	0.0%	5.8%	0.0%	0.0%
	Mono-material film	62.4%	67.5%	80.3%	72.8%
	Other flexible	12.2%	15.2%	15.9%	13.9%
	Other rigid	15.9%	10.4%	3.1%	13.3%
	Rigid foam	0.0%	0.0%	0.0%	0.0%
	Small plastics	0.0%	0.0%	0.0%	0.0%
Polymer	HDPE	8.7%	0.2%	0.1%	0.0%
	LDPE	62.4%	67.5%	80.3%	72.8%
	LLDPE	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%
	PET	12.4%	15.4%	15.6%	13.9%
	PETG	0.0%	0.0%	0.0%	0.0%
	PHA	0.0%	0.0%	0.0%	0.0%
	PLA	0.0%	0.0%	0.0%	0.0%
	PP	16.5%	16.9%	4.0%	13.3%
	PS	0.0%	0.0%	0.0%	0.0%
	PVC	0.0%	0.0%	0.0%	0.0%

	McDonald's Corporation	2018	2019	2020	2021	2022
Tonnage	Total tonnage	153,000	181,000	156,000	162,000	164,000
	Change in tonnage from 2018	-	+18.8%	+2.0%	+5.7%	+7.6%
	Normalization factor	*	63.8B units procured	53.3B units procured	56.4B units procured	55.5B units procured
	Normalized change in tonnage from 2019	*	*	+2.8%	+0.8%	+4.3%
Inputs	Recycled content	2.6%	1.2%	0.6%	0.8%	1.3%
	Biobased content (resp. sourced)	0.0%	0.0%	0.0%	0.0%	0.0%
	Biobased content (other)	0.1%	0.6%	0.9%	2.0%	2.9%
	Virgin content	97.3%	97.7%	98.5%	97.2%	95.8%
Form	Bottle	0.0%	0.0%	0.0%	0.0%	0.0%
	Closure	27.7%	25.6%	25.3%	0.0%	0.0%
	Mono-material film	6.0%	11.3%	10.3%	14.8%	10.6%
	Other flexible	1.4%	3.5%	4.8%	1.3%	4.7%
	Other rigid	47.2%	45.7%	47.7%	73.2%	77.4%
	Rigid foam	2.2%	0.0%	0.0%	0.0%	0.0%
	Small plastics	15.5%	14.0%	11.9%	10.7%	7.3%
Polymer	HDPE	0.1%	3.5%	4.3%	4.1%	3.0%
	LDPE	6.0%	11.3%	10.9%	11.1%	10.6%
	LLDPE	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	1.4%	0.0%	0.0%	0.0%	0.0%
	PET	7.7%	11.0%	7.2%	6.0%	3.9%
	PETG	0.0%	0.0%	0.0%	0.0%	0.0%
	PHA	0.0%	0.0%	0.0%	0.0%	0.0%
	PLA	0.1%	0.3%	0.2%	1.1%	0.9%
	PP	54.3%	53.2%	59.5%	60.7%	65.5%
	PS	30.4%	20.7%	18.0%	17.0%	16.1%
PVC	0.0%	0.0%	0.0%	0.0%	0.0%	

*2018 normalization factor unavailable due to inconsistencies with the normalization factor for subsequent years.

	Procter & Gamble	2019	2020	2021	2022
Tonnage	Total tonnage	605,000	609,000	679,000	685,000
	Change in tonnage from 2019	-	+0.6%	+12.3%	+13.2%
	Normalization factor	\$67.7B net sales	\$71.0B net sales	\$76.1B net sales	\$80.2B net sales
	Normalized change in tonnage from 2019	-	-4.0%	-0.2%	-4.5%
Inputs	Recycled content	6.3%	7.4%	9.0%	10.7%
	Biobased content (resp. sourced)	0.0%	0.0%	0.0%	0.0%
	Biobased content (other)	0.0%	0.0%	0.0%	0.0%
	Virgin content	93.7%	92.6%	91.0%	89.3%
Form	Bottle	49.4%	46.2%	56.1%	48.2%
	Closure	13.0%	6.3%	6.4%	10.9%
	Mono-material film	0.0%	0.0%	0.0%	5.2%
	Other flexible	33.7%	16.0%	12.7%	14.4%
	Other rigid	3.9%	31.4%	24.9%	21.3%
	Rigid foam	0.0%	0.0%	0.0%	0.0%
	Small plastics	0.0%	0.0%	0.0%	0.0%
Polymer	HDPE	18.6%	32.5%	33.6%	36.3%
	LDPE	25.3%	16.0%	12.7%	7.9%
	LLDPE	0.0%	0.0%	0.0%	4.3%
	Other	8.4%	6.6%	7.7%	6.7%
	PET	30.9%	21.1%	22.2%	20.7%
	PETG	3.9%	1.1%	1.0%	0.9%
	PHA	0.0%	0.0%	0.0%	0.0%
	PLA	0.0%	0.0%	0.0%	0.0%
	PP	13.0%	22.8%	22.8%	22.4%
	PS	0.0%	0.0%	0.0%	0.5%
	PVC	0.0%	0.0%	0.0%	0.1%

	Starbucks	2018	2019	2020	2021	2022
Tonnage	Total tonnage	191,000	133,000	121,000	151,000	153,000
	Change in tonnage from 2019	-	New baseline	-9.3%	+13.4%	+15.3%
	Normalization factor	-	\$26.5B net revenues	\$23.5B net revenues	\$29.1B net revenues	\$32.3B net revenues
	Normalized change in tonnage from 2019	-	New baseline	+2.2%	+3.5%	-5.2%
Inputs	Recycled content	6.4%	5.6%	5.6%	4.6%	6.6%
	Biobased content (resp. sourced)	0.0%	0.0%	0.0%	0.0%	4.8%
	Biobased content (other)	1.0%	0.7%	0.9%	1.6%	0.0%
	Virgin content	92.6%	93.7%	93.5%	93.8%	88.5%
Form	Bottle	15.4%	19.6%	19.9%	20.6%	20.0%
	Closure	19.5%	18.4%	17.6%	16.6%	15.0%
	Mono-material film	1.9%	3.2%	3.0%	0.0%	0.1%
	Other flexible	6.7%	7.6%	7.6%	10.3%	14.7%
	Other rigid	51.2%	48.4%	49.5%	50.9%	48.1%
	Rigid foam	0.0%	0.0%	0.0%	0.0%	0.0%
	Small plastics	5.3%	2.8%	2.5%	1.6%	2.1%
Polymer	HDPE	12.9%	3.0%	2.8%	12.5%	12.0%
	LDPE	5.0%	5.9%	5.2%	3.2%	1.8%
	LLDPE	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%
	PET	19.8%	21.3%	27.9%	24.0%	21.3%
	PETG	0.0%	0.0%	0.0%	0.0%	0.0%
	PHA	0.0%	0.0%	0.0%	0.0%	1.9%
	PLA	1.0%	0.7%	0.9%	1.6%	2.9%
	PP	57.1%	66.8%	61.3%	56.7%	59.2%
	PS	3.7%	2.1%	1.9%	2.0%	0.6%
	PVC	0.4%	0.1%	0.0%	0.0%	0.2%

	The Coca-Cola Company	2018	2019	2020	2021	2022
Tonnage	Total tonnage	3,010,000	3,100,000	2,960,000	3,220,000	3,470,000
	Change in tonnage from 2018	-	+2.8%	-1.6%	+7.1%	+15.4%
	Normalization factor	117B bottles sold	120B bottles sold	112B bottles sold	125B bottles sold	134B bottles sold
	Normalized change in tonnage from 2018	-	+0.3%	+2.7%	+0.2%	+0.8%
Inputs	Recycled content	8.7%	9.3%	11.2%	13.6%	14.9%
	Biobased content (resp. sourced)	1.5%	1.7%	0.1%	0.4%	0.0%
	Biobased content (other)	0.1%	0.0%	0.0%	0.0%	0.1%
	Virgin content	89.7%	89.0%	88.6%	86.0%	85.0%
Form	Bottle	91.7%	99.9%	99.9%	100.0%	99.9%
	Closure	8.0%	0.0%	0.0%	0.0%	0.0%
	Mono-material film	0.1%	0.0%	0.0%	0.0%	0.0%
	Other flexible	0.2%	0.1%	0.1%	0.0%	0.1%
	Other rigid	0.0%	0.0%	0.0%	0.0%	0.0%
	Rigid foam	0.0%	0.0%	0.0%	0.0%	0.0%
	Small plastics	0.0%	0.0%	0.0%	0.0%	0.0%
Polymer	HDPE	6.1%	0.0%	0.0%	0.0%	0.0%
	LDPE	0.2%	0.1%	0.1%	0.0%	0.1%
	LLDPE	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%
	PET	91.4%	99.9%	99.9%	100.0%	99.9%
	PETG	0.0%	0.0%	0.0%	0.0%	0.0%
	PLA	0.0%	0.0%	0.0%	0.0%	0.0%
	PP	2.0%	0.0%	0.0%	0.0%	0.0%
	PS	0.0%	0.0%	0.0%	0.0%	0.0%
	PVC	0.0%	0.0%	0.0%	0.0%	0.0%

Appendix C

TABLE C1. Form description and classification

Packaging Classification	Form Category	Form Category Definition	Form Description Examples
RIGID	Bottle	A form of rigid packaging having a comparatively narrow neck or mouth with a closure and usually no handle. <i>Source: ISO 21067:2007</i>	Bottle
	Closure	Includes caps and closures that would be left on containers going to recycling. Caps/closures that would be disposed of separately from the primary container would fall under small plastics (problematic to recycle as separate components due to size).	Screw caps on plastic bottles
	Rigid foam	Rigid products made from foamed polymers, typically Polystyrene (PS).	Foamed products like EPS cups, foamed PS plates, egg cartons, meat and produce trays
	Other rigid	Category used to capture rigids that are not classified as bottles, closures, foamed rigids, or small plastics.	Solid cups, jars, disposable utensils, thermoforms, trays, blisters, non-foam clamshells
RIGID/ FLEXIBLE	Small plastics	Items smaller than 2 inches in two dimensions require testing to determine the appropriate APR recyclability category. These small packages are lost to the plastic recycling stream. <i>Source: APR</i>	Plastic straws, cutlery, coffee sticks
	Raw material	Polymer used as raw material for manufacturing plastic products or packaging.	Polymer pellets used as primary content of molded or extruded product; polymer used as coating or barrier material
FLEXIBLE	Mono-material film	Includes mono-material stretch and shrink films and mono-material film bags and sacks that are suited for recycling. SHRINK FILM: plastic material that shrinks in size when heated to conform to the item(s) packaged. <i>Source: ISO 21067-1:2016</i> STRETCH WRAP: material that elongates when applied under tension and which, through elastic recovery, conforms to item(s) packaged. <i>Source: ISO 21067-1:2016</i>	Pallet wrap, stretch and shrink wrap around products for shipment, single-use plastic grocery bags
	Other flexible	Includes multi-material/laminate films.	Direct product packaging, IDirect product packaging, laminated beverage and food pouches, metallized films, snack bags, and wrappers

TABLE C2. List of countries reported by *ReSource* Members in 2022 and the regional groupings used in the analysis.

Region	Country
East Asia & Pacific	Australia, Brunei Darussalam, Cambodia, China, Fiji, French Polynesia, Hong Kong SAR China, Indonesia, Japan, Republic of Korea, Lao People’s Democratic Republic, Macao SAR China, Malaysia, Mongolia, Myanmar, New Caledonia, New Zealand, Papua New Guinea, Philippines, Singapore, Taiwan China, Thailand, Viet Nam
Europe & Central Asia	Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Luxembourg, Monaco, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom, Uzbekistan
Latin America & Caribbean	Argentina, Aruba, The Bahamas, Barbados, Belize, Bolivia, Brazil, Cayman Islands, Chile, Colombia, Costa Rica, Curaçao, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Lucia, St. Martin (French part), Trinidad and Tobago, Turks and Caicos Islands, Uruguay, Bolivarian Republic of Venezuela
Middle East & North Africa	Algeria, Bahrain, Djibouti, Arab Republic of Egypt, Iraq, Israel, Jordan, Kuwait, Lebanon, Malta, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, United Arab Emirates, West Bank and Gaza, Republic of Yemen
North America	Canada, United States
South Asia	Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka
Sub-Saharan Africa	Botswana, Cabo Verde, Cameroon, Republic of the Congo, Ethiopia, Ghana, Guinea, Kenya, Lesotho, Madagascar, Mozambique, Namibia, Nigeria, Rwanda, Seychelles, Somalia, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe

Endnotes

- 1 “The New Plastics Economy: Rethinking the Future of Plastics.” World Economic Forum, 2016. https://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf.
- 2 “Breaking the Plastic Wave: A Comprehensive Assessment of Pathways Towards Stopping Ocean Plastic Pollution.” The Pew Charitable Trusts and SYSTEMIQ, 2020. https://www.pewtrusts.org/-/media/assets/2020/10/breakingthe-plasticwave_mainreport.pdf.
- 3 “Impacts of Plastic Pollution in the Oceans on Marine Species, Biodiversity and Ecosystems.” WWF-Germany, 2022. https://wwfint.awsassets.panda.org/downloads/wwf_impacts_of_plastic_pollution_on_biodiversity.pdf.
- 4 “Reuse – rethinking packaging,” Ellen MacArthur Foundation, 2019. <https://ellenmacarthurfoundation.org/reuse-rethinking-packaging>.
- 5 Analysis conducted by WWF using data from UNEP, Trucost, and the Plastic Disclosure Project.
- 6 We rely on the ISO 14021:2016 definition of post-consumer recycled content and the U.S. Department of Agriculture definition of biobased content. Together, we consider post-consumer recycled content and responsibly sourced biobased content as constituting “sustainable” or “responsible” inputs. WWF follows the Bioplastic Feedstock Alliance’s definition of responsibly sourced biobased content; see Glossary for complete definitions.
- 7 Advanced products are those that are sustainably produced, mitigate climate change, and reduce the risk of fossil depletion. This term typically captures future materials innovations that are currently in the design stage or at a very small scale. We align with the [Roundtable for Sustainable Biomaterials’ Advanced Products Standard](#).
- 8 “The Global Commitment 2022 Progress Report.” Ellen MacArthur Foundation and UN Environment Programme, 2022. <https://ellenmacarthurfoundation.org/global-commitment-2022/overview>.
- 9 “Reuse – Rethinking Packaging.” Ellen MacArthur Foundation, 2019. <https://ellenmacarthurfoundation.org/reuse-rethinking-packaging>.
- 10 WWF believes that responsibly sourced biobased content at a minimum must be legally sourced; be derived from renewable biomass; pose no adverse impact on food security; have no negative impact on land conversion, deforestation, or critical ecosystems; and provide environmental benefits—including near-term climate benefits—compared with fossil-based plastic. Credible certifications such as the Roundtable on Sustainable Biomaterials can help ensure responsible sourcing.
- 11 Based on the Global Commitment definition requiring that a packaging category achieves a 30% recycling rate in regions that collectively have over 400 million inhabitants.
- 12 These markets were identified as markets with advanced infrastructure. This is defined by McDonald’s as “Mature waste and recycling infrastructure at a national level that has (1) recycling infrastructure network across the entire market, (2) multiple materials being recycled within this national infrastructure network, (3) existing legislation on recycling, and (4) high customer awareness of waste and recycling.” At the end of 2022, that included 21 markets where McDonald’s operates.
- 13 Primary guest packaging refers to disposable products used to package guest food on premises at McDonald’s restaurants that is given to customers in all order channels, including containers, cups, clamshells, wraps, foodservice bags, napkins, folding cartons, salad bowls, lids, straws, napkins and cup carriers, and Happy Meal book and toy packaging.
- 14 “The Global Commitment 2022 Progress Report.” Ellen MacArthur Foundation and UN Environment Programme, 2022. <https://ellenmacarthurfoundation.org/global-commitment-2022/overview>.
- 15 “Unpacking Labeling and Design: U.S. Consumer Perception of Compostable Packaging.” Closed Loop Partners, 2023. <https://www.closedlooppartners.com/research/us-consumer-perception-of-compostable-packaging/>.
- 16 The ReSource Footprint Tracker allows key actors to align on metrics for success and identify targeted interventions across the global landscape. In the spirit of driving transformational change, in late 2020 the ReSource Footprint Tracker methodology was released as an open access publication. Data improvement and harmonization will continue to be a priority for ReSource moving forward, including collaborating to ensure a successful evolution of reporting tools and disclosure frameworks for corporate plastic footprints and country-level waste management reporting.
- 17 “CDP’s environmental disclosure system opens for reporting on plastics for first time at request of investors with US\$130+ trillion in assets.” CDP, April 19, 2023. <https://www.cdp.net/en/articles/media/cdps-environmental-disclosure-system-opens-for-reporting-on-plastics-for-first-time-at-request-of-investors-with-us130-trillion-in-assets>.
- 18 “Towards a Treaty to End Plastic Pollution: Global Rules to Solve a Global Problem.” WWF, November 3, 2022. https://wwfint.awsassets.panda.org/downloads/towards_a_treaty_to_end_plastic_pollution_final_report.pdf.





<https://resource-plastic.com/>