Packaging the future

A material matter

Our global plastic consumption is set to double over the next 20 years and the flow of plastic into the ocean is projected to nearly triple within the same timeframe.

Packaging and plastics in a global context

Circular Economy, resource scarcity and conscious consumption; the last decade has borne witness to an exponential rise in the interest in circularity and closed-loop systems from companies, consumers, governments and investors. The topic of plastic use – particularly packaging – has been at the heart of this conversation, as our single-use consumer habits have been examined, and images of unmanaged waste exhibiting household brand names have garnered global attention. Circular principles have multi-trillion-dollar implications[1], and present growth opportunities which align with targets covered by multiple UN Sustainable Development Goals (SDGs), particularly sustainable consumption and production (SDG 12).

The Plastic Investor Working Group, created by the Principles for Responsible Investment (PRI), a UN-supported network of investors, carried out research which highlighted how, "the plastic value chain is complex, touching most (if not all) business sectors globally, exposing investor portfolios to an array of risks."[2] Throughout the last few years, we have seen regulatory, geo-political, and supply chain risks materialize. In October 2020, the WWF, the Ellen MacArthur Foundation and Boston Consulting Group called for a Global treaty on plastic pollution,[3] which could harmonise and simplify reporting, and offer greater transparency to better manage these risks.

Our global plastic consumption is set to double over the next 20 years[4] and the flow of plastic into the ocean is projected to nearly triple within the same timeframe.[5] As plastic packaging represents a significant portion of our plastic use, and because of its short use-cycle and pervasive nature, efforts to increase circular plastic systems and reduce the impact of inappropriate disposal and environmental leakage have seen a strong focus on packaging.[6]

[1] Ellen MacArthur Foundation (2020), "Financing the circular economy"

[2] https://www.unpri.org/sustainability-issues/environmental-social-and-governance-issues/environmental-issues/plastics

[3] WWF, The Ellen MacArthur Foundation & Boston Consulting Group (2020), "The business case for a UN treaty on plastic pollution"

[4] World Economic Forum (2016), "The New Plastics Economy Rethinking the future of plastics"

[5] The Pew Charitable Trusts and SYSTEMIQ (2020), "Breaking the Plastic Wave: A Comprehensive Assessment of Pathways Towards Stopping Ocean Plastic Pollution"

[6] Martin C Heller et al (2020) "Environ. Res. Lett. 15 094034"

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Addressing Plastic in the 2020 CSA

Within this context, all 2020 Corporate Sustainability Assessment (CSA) questions within the Packaging criterion were updated to more accurately reflect the financially material topics addressed above: A new question uniquely devoted to plastics was introduced, and disclosure metrics across all materials expanded to include targets, as well as production volumes and data coverage details.

A similar disclosure approach was adopted for the Use of Recycled and Sustainably Sourced Materials question within the Product Stewardship criterion.

Finally, the number of industries that the Packaging criterion is applied to has also been expanded, in line with the PRI plastic-related risk assessment.[7]

The Price of Plastic

Emerging financial materiality of the topic

How and why is this topic financially material?

The PRI Plastic Investor Working Group's report highlights that "the containers and packaging sector, as well as related sectors such as food and beverage and consumer goods, face increasing reputational and regulatory pressures to use alternative materials and recycled content at scale."[8]

Regulatory risks can be found in bans, taxes, levies or regulation: China's 2018 ban on impure recycled plastic scrap lead to total plastics exports dropping globally by around 50% from 2016 to 2018 and former key plastic waste exporter countries were left dealing with a surplus of unprocessed or inadequately processed waste.[9]

[7] https://www.unpri.org/plastics/plastics-the-challenges-and-possible-solutions/4773.article

[8] https://www.unpri.org/plastics/risks-and-opportunities-along-the-plastics-value-chain/4774.article

[9] Greenpeace (2019), "Data from the global plastics waste trade 2016-2018 and the offshore impact of China's foreign waste import ban"

The number of countries implementing regulations on single-use plastic items has more than doubled over the past five years[10], and both European[11] and US[12] markets face upcoming packaging legislation such as 25% minimum recycled content thresholds, and a European plastic tax from January 2021[13], closely followed by a similar initiative in the UK in 2022.[14]

Risks can also be found in access to recycled plastic feedstocks, and their associated costs: Lockdowns and social distancing lead to a drop in recycling rates in 2020 affecting recycled PET supply, and the fall in crude oil price at the beginning of the year meant during the height of the pandemic, post-consumer PET bottle bales became more expensive than virgin PET feedstocks.[15]

Continuing with a business as usual scenario, by 2040 businesses will face an annual financial risk of US$ 100 billion.

This places an economic burden on companies already struggling to meet recycled content targets, as minimum recycled content legislation is enforced and companies may be forced to pay a premium for recycled content. Transition to other alternative materials aside from recycled content will likely also have cost implications for companies, not only at the research & development and sourcing stages, however also in operational costs. Companies that are introducing more aggressive internal targets ahead of legislation, adapting their supply chain and budgeting to absorb these costs, will find themselves ahead of those who don't.

Further risks identified by the group include the reputational risks from increased public scrutiny, the impact of using alternative materials for plastic producers, access to raw materials to produce recycled plastics (for producers), and scalability of new business models and market acceptance.[16]

The PRI's Plastic Investor Working Group consists of 29 global investors representing US$5.9 trillion in assets; the interest towards addressing plastics in investment solutions from this volume of assets reinforces the financial materiality of this topic for companies.

Internalising externalities

As well as the risks and costs that we can currently quantify, we must consider the external costs of mismanaged packaging waste to society and the environment, and the financial risk that this would pose, should companies be forced to internalize these costs.

The Pew Charitable trusts estimates that by continuing with a business as usual scenario, by 2040 businesses will face an annual financial risk of US$100 billion if governments require them to cover waste management costs at expected volumes and recyclability.[17]

[10] Ibid, see 3

[11] Directive of the European Parliament and of the Council on the reduction of the Impact of Certain Plastic Producs on the Environment (2019)

[12] https://www.wastedive.com/news/tracking-the-future-of-us-recycling-policy-in-congress/570778/

[13] European Council (2020), https://www.consilium.europa.eu/media/45109/210720-euco-final-conclusions-en.pdf

[14] https://www.gov.uk/government/publications/introduction-of-plastic-packaging-tax/plastic-packaging-tax

[15] S&P Global Platts

[16] Ibid, see 8

[17] Ibid, see 5

The True Cost of Plastic Pollution

It has long been recognised that due to its durability, plastic pollution poses a significant threat to both marine and terrestrial ecosystems. However, with the exponential growth in plastic production and associated pollution, there has been increasing recognition of the negative impacts of plastic beyond just the environment.

While the direct impacts of plastic pollution on biodiversity such as entanglement and ingestion, are relatively well documented, with over 900 species known to be affected by plastic debris[18], indirect impacts across the entire life cycle of plastic products from production to end-of-life tend to receive less attention. However, it is important to recognise that plastic also has significant climate impacts across both the production and waste management phases. With plastic production becoming one of the fastest growing uses of fossil fuels, based on current projections, production and incineration of plastics will account for 10 - 13% of the annual 1.5C carbon budget by 2050[19].

It is clear that plastic pollution also represents a significant economic cost to society at large: This is seen both in terms of the direct impacts associated with the loss of tourism income, damage to fishing vessels and costs of increased waste management infrastructure, as well as the indirect impacts associated with the loss of ecosystem services. Although the full environmental impacts are often difficult to monetize, it is estimated that in 2011 alone there was a global loss of up to $2.5trn in benefits derived from marine ecosystem services due to plastic pollution[20].

Lastly, it is also important to consider the human impacts of plastic pollution. While wealthier communities tend to generate higher volumes of waste, it is typically poorer communities who experience the biggest social impacts of plastic pollution. Communities with inadequate waste management are exposed to air pollution from spontaneous fires in dumps, disease and toxins from dump site contents and its decomposition, while waste pickers in the informal sector face dangerous work and living conditions. There are also significant flooding and associated disease-related risks from clogged drainage and sewage systems.

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[18] IKuhn et al (2020), "Marine Pollution Bulletin: Quantitative overview of marine debris ingested by marine megafauna"

[19] CIEL (2019), "Plastic & Climate: The Hidden Costs of a Plastic Planet"

[20] Beaumont et al (2019), "Marine Pollution Bulletin: Global ecological, social and economic impacts of marine plastic"

Producing packaging made from 100% recyclable material is not beneficial if the actual recycling is not taking place at scale.

Current proposed solutions and limitations

Stakeholders along the value chain need to work together to collectively stop the linear[21] flow of packaging into our waste streams and our natural environment, while ensuring that we are preserving the value of the materials.

Multiple solutions and strategies are available to corporates and the most common solutions are discussed below:

Recyclable packaging

Creating packaging from material that is recyclable is currently a popular solution for many companies and, when practised correctly, this method has the strong advantage of keeping the value of a material within the economy.

For the 2020 CSA we aligned our definition of recyclable packaging with the Ellen MacArthur Foundation's definition: "A packaging or packaging component is recyclable if its successful post-consumer collection, sorting, and recycling is proven to work in practice and at scale."[22] This differentiates between what is technically recyclable, and what recycling infrastructure exists, in order to avoid classing packaging as recyclable in geographies where this recycling is not available.

Compostable packaging

Compostable packaging avoids landfill or incineration, supports a closed-loop system with nutrients being returned to the soil and offers a solution where packaging may contaminate organic waste streams.[23] However, as with recycling, the compostability of packaging relies on an appropriate infrastructure as well as cross-industry alignment to be in place to ensure that it is actually happening.

Again, for the CSA we have used the definition by the Ellen MacArthur Foundation: "A packaging or packaging component is compostable if it is in compliance with relevant international compostability standards and if its successful post-consumer collection, sorting, and composting is proven to work in practice and at scale."[24]

Inclusion of post-consumer recycled content (over virgin content)

As stated above, producing packaging made from 100% recyclable material is not beneficial if the actual recycling is not taking

[21] A linear model of resource consumption is one that follows a 'take-make-dispose' pattern, where products are discarded by the consumer once they no longer serve their purpose. The Ellen MacArthur Foundation (2013), "Towards The Circular Economy"

[22] The Ellen MacArthur Foundation (2018), "New Plastics Economy Global Commitment"

[23] The Ellen MacArthur Foundation (2020), "Upstream Innovation: A guide to packaging solutions"

[24] Ibid, see 20

place at scale. In order to create a market for high quality recycled content – thus increasing investment in the collection, sorting and recycling industry – demand needs to be created by producers through the inclusion of high percentages of post-consumer recycled content[25] within their packaging. This equally reduces the reliance on virgin (fossil) feedstocks.

"Designing products for reuse is preferable to simple substitution with another single-use material."

Bio-based plastic packaging

The term bio-based implies that the material or product is derived from biomass, or plants, which for bio-based plastics is typically corn, sugarcane, or cellulose.[26] The biggest advantage of the use of bio-based materials is the diversion from fossil feedstocks to a regenerative material. However, care must be taken, as bio-based does not automatically equal bio-degradable, nor compostable. In the 2020 CSA, companies were not requested to disclose data separately around their use of bio-based plastics.

Reusable packaging

For the 2020 CSA, we defined reusable packaging as "Packaging which has been designed to accomplish or proves its ability to accomplish a minimum number of trips or rotations in a system for reuse. The packaging needs to be refilled or used again for the same purpose for which it was conceived", basing the definition on the recommendations of the Ellen MacArthur Foundation. [27]

Reusable packaging can offer many benefits, not only to the consumer who can benefit from a more personalised and improved customer experience, but also to the company, who can benefit from cost savings and access to data on customer preferences and habits. The advantages of a re-use model will be discussed in more depth below in the section 'Packaging commitments'.

Reduction or elimination

It is imperative that policies, innovations, consumer behaviour shifts and incentives are implemented that lead to reduced material demand or product redesign for avoidable plastic, which should not require a replacement.[28]

In the 2020 CSA, companies were requested to report their total weight of all plastic packaging produced over the last four years and if they had a target for this figure for 2019.

Substitution for non-plastic materials

Substitution involves plastic packaging being replaced with an alternative material – for example paper or aluminium – for which effective recycling or composting is possible. However, the sustainability of sourcing raw materials, existing recycling infrastructure and the carbon footprint should all be included in a lifecycle analysis when considering substitution. The Pew Charitable Trusts' report Breaking the Plastic Wave advises that "designing products for reuse is preferable to simple substitution with another single-use material."[29]

Within the Packaging Materials question, the CSA measures volumes of glass, metal and wood and paper fiber packaging.

[25] Ibid, see 22

[26] https://www.european-bioplastics.org/bioplastics/ "

[27] Ibid, see 20

[28] Ibid, see 5

[29] Ibid, see 5

Reporting landscape and availability of data

As the world has sought solutions to the plastics issue, the need for more and better data on plastics use and its fate after-use has become a priority. In response to increasing competitive, consumer and regulatory forces, businesses across the plastic value chain are starting to wrestle with the difficulties of collecting and using this data. As a result, the availability and quality of company-level data on plastics is undoubtedly improving.

Participation in voluntary initiatives with mandatory annual public reporting such as the *New Plastics Economy Global Commitment* [30] – whose signatories account for more than 20% of the global plastic packaging market – has led many businesses to assess the quantity and types of plastic packaging they use for the first time.[31] This has driven substantial improvements in their internal data – increasingly being brought within scope of third-party verification processes – and thereby their understanding of their packaging portfolio and ability to drive progress. At the same time, new policy measures targeting plastic packaging are forcing businesses to track new data to ensure compliance. The investment community is in turn placing more emphasis on this data, increasingly using it to inform engagement with portfolio companies.

With businesses keen to communicate high ambitions and progress around plastics, inconsistencies and lack of clarity on certain terms and metrics can make it difficult to understand and compare different claims. To overcome this barrier to industry transparency, the adoption of common metrics and definitions by major reporting platforms has been an important step forward. Alignment is now being driven through a number of initiatives. Signatories to the New Plastics Economy Global Commitment now report annually against a common set of guidelines and metrics – these same definitions have been incorporated into the packaging criterion of the Corporate Sustainability Assessment, as well as the expanding New Plastics Economy Plastics Pact network and beyond.

Despite this progress, there remains huge scope to improve availability and quality of plastic packaging data. In particular, and as demonstrated by the insights shared in this publication, the vast majority of businesses outside the Global Commitment still do not collect and/or publicly disclose data related to their use of plastic packaging. Those failing to take action to track this data now risk falling far behind the rest of the industry in managing the risks – and exploiting opportunities – associated with their use of packaging.

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[30] https://www.newplasticseconomy.org/projects/global-commitment

[31] Ellen MacArthur Foundation & UN Environment Programme (2020), "Global Commitment 2020 Progress Report" https://www.ellenmacarthurfoundation.org/global-commitment

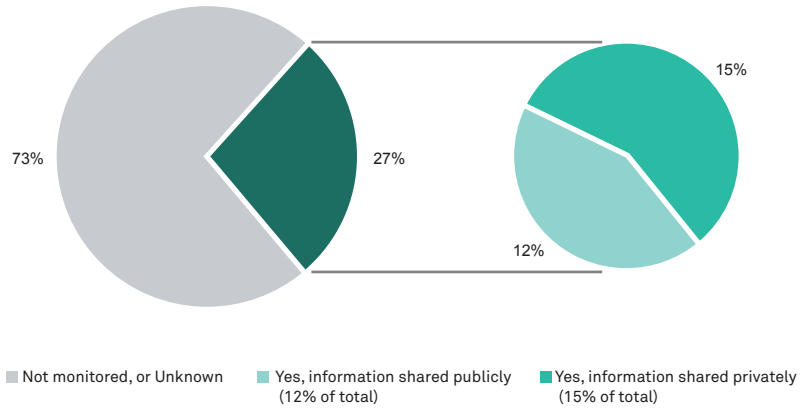
Non-Plastic Packaging Materials

To maintain a holistic overview of packaging trends across all materials commonly used, in 2020 we updated the CSA questions requiring disclosure of wood and paper fiber, metal and glass usage, and their respective recycled or certified content and targets. This affected companies in industries such as beverages, food products, retailing, etc however not in the containers and packaging industry.

Monitoring

The results highlight that there is significant progress to be made; both in terms of monitoring materials used and subsequent disclosure. Barely more than a quarter of respondents confirmed they are monitoring the amounts of packaging materials used and, among those, less than half are reporting their usage publicly:

Figure 1: Companies monitoring the amounts of packaging materials used



Source: SAM CSA 2020; performance based on 515 responses by companies actively participating in the CSA as well as those assessed on Publicly available information.

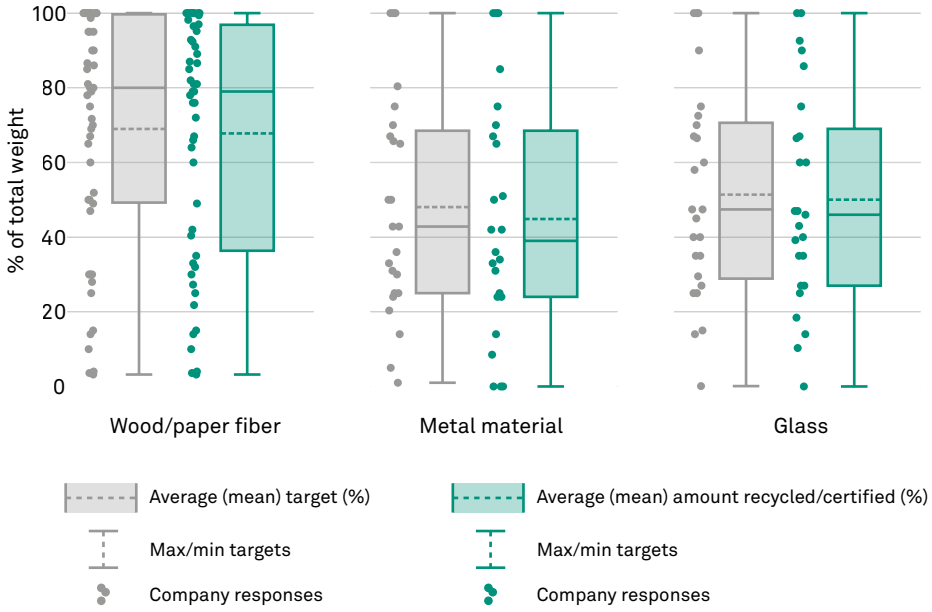
Amongst the 27% of companies who monitor the amount of packaging materials used, we observe that monitoring does not necessarily extend to target-setting: Only a quarter of companies are setting targets related to inclusion of recycled or certified glass content, and this drops to a fifth for metal. For wood or paper fiber, there is a slightly higher rate of target-setting at just under 40%, with a quarter of those having 100% recycled/certified content targets.

> Considering packaging-composition-related commitments, we see that the use of recyclable packaging is the favoured commitment, stated by 30% of companies assessed.

Targets

If we consider the average recycled/certified content targets for 2019 among those who provided data, alongside the average actual achieved amounts of recycled content we see the below:

Figure 2: Average Achieved Recycled/Certified Content vs Average Target (2019)



Source: SAM CSA 2020; data considers 141 companies who are monitoring their packaging materials and their covered operations

For wood and paper fiber, we observe that companies set higher targets on average compared to metal and glass, and the average percentage realised is also noticeably higher. Among the data for metal and glass, we see average targets and average actual percentages achieved in 2019 hovering around 50%, however given the wide spread of responses, this is more a reflection that companies are all at very different stages of progress, and that there is currently not one uniform trend.

Considering that certifications such as Forest Management Certification (FSC) have been in place since the mid-90s,[32] the spread of companies' realised percentages of recycled and/or certified material wood or paper fiber feedstocks seems lower than expected.

Equally, metals commonly used within packaging such as aluminium (used for beverage and aerosol cans and food trays) are often touted as 'infinitely recyclable', and that the use of recycled aluminium saves up to 95% energy compared to virgin feedstocks.[33] Considering that the aluminium industry is known across Europe for its extremely high rates of capture and recycling, it is surprising that targets and attained percentages are not reported higher on the scale.

Containers and Packaging

When reviewing the performance of companies specifically within the containers and packaging industry, we see almost 75% are monitoring the amounts of packaging materials used in some form. However, in line with the industries discussed above, the percentage of companies setting targets for recycled content remains low, and the availability of data is too limited to draw out significant trends for 2019.

[32] https://www.fsc-uk.org/en-uk/about-fsc/who-is-fsc/our-history

[33] https://alupro.org.uk/consumers/why-is-recycling-aluminium-so-important/

Aside from increasing the amount of recycled content within their own packaging, companies have a responsibility to ensure that packaging made with recyclable materials ends up in an appropriate recycling facility.

Corporate Plastic Practices

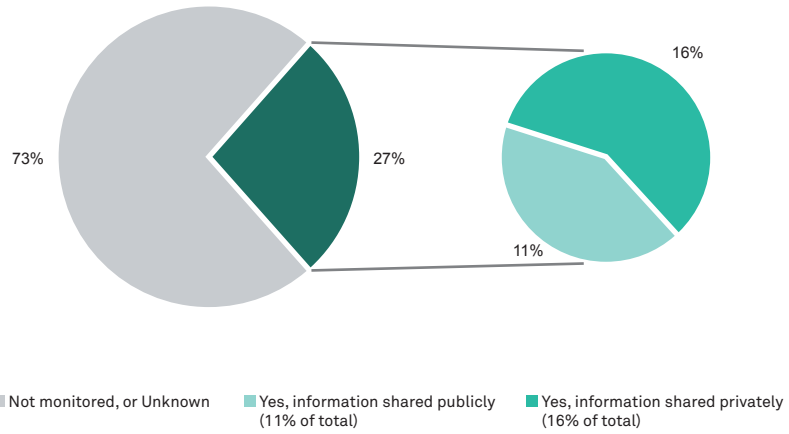
The *Plastic Packaging* question seeks insight into companies' levels of monitoring their plastic packaging volume and materials, as well as their targets for recyclable and compostable plastic packaging, and the percentage of recycled content included.

Monitoring and availability of data

Rates of monitoring

Similar to wood/paper fiber, metal and glass, we observe that just over a quarter of companies state they are monitoring their plastic packaging performance in terms of total weight of all plastic packaging and related shares of recyclable, compostable plastic packaging and the share of recycled content in their plastic packaging:

Figure 3: Companies monitoring their performance with regards to plastic packaging



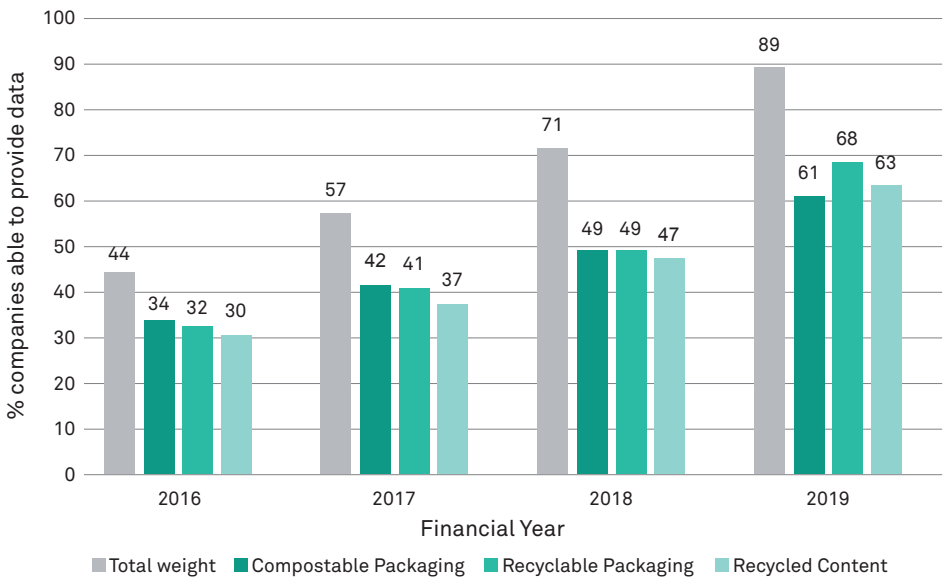
Source: SAM CSA 2020; based on 525 responses by companies actively participating in the CSA as well as those assessed on Publicly available information.

Data availability

In the 2020 CSA we asked companies to provide figures for their total weight of packaging produced, and the relevant shares of plastic type, in each of the last four years. The analysis below (figure 4) considers only this quarter of companies (figure 3) who actively monitor their performance.

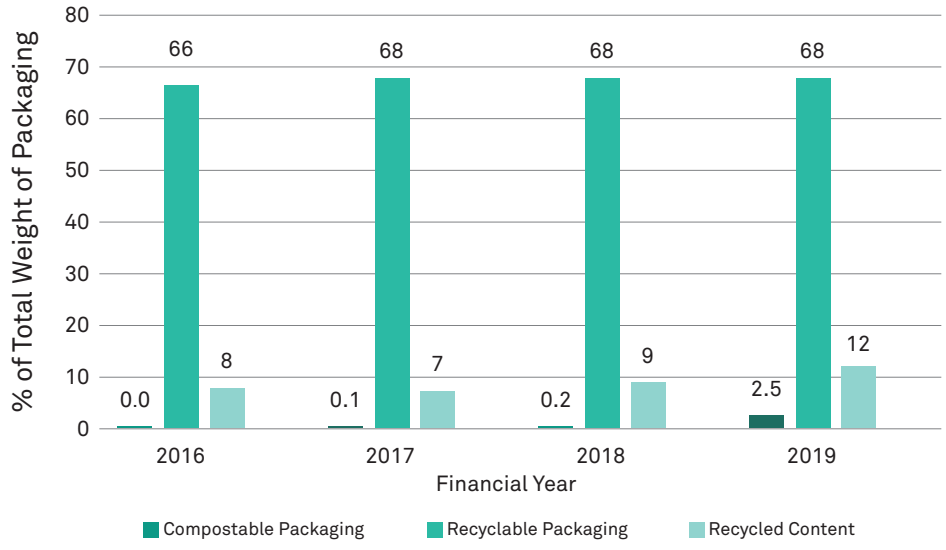
In general companies seem to improve their coverage of data-availability over the years: The number of companies that can provide data for 2019 is double the number who were able to provide data for 2016. Similarly, we see a two-fold increase in the percentage of companies monitoring their volumes of recyclable packaging and recycled content. However, while a larger share of companies has some data available for 2019, the average coverage as percentage of goods sold reduced from over 80% in 2018, to an average coverage of approximately 70% in 2019.

Figure 4: Packaging Data Availability



Source: SAM CSA 2020; Data for all years provided in 2020; Data based on 142 companies they are actively monitoring their performance.

Figure 5: Average Content % Achieved (of Total of all Plastic Packaging)



Source: SAM CSA 2020; Data for all years provided in 2020; Data based on 142 companies stating they are actively monitoring their performance and their covered operations. .

Much stronger commitments to the removal of unnecessary packaging and overall packaging reduction are needed to stop our current flow of mismanaged plastic waste.

Transparency doesn't equal sustainability

Despite the positive trend of increasing data collection and monitoring, there remains significant progress to be made in terms of target-setting – both in the number of companies setting targets across these areas and how ambitious the set targets are – and performance in general.

General performance

Despite twice as many companies having recyclable packaging data available for 2019 compared to for 2016 (figure 4), when taking an average of the actual rates achieved, we see stability in this percentage across the last four years. This indicates that companies are yet to significantly embrace the opportunities of switching away from hard-to-recycle plastics in favour of those currently recycled at scale.

We observe average recycled content increasing by approximately a third from 2018-2019 from 9% to 12% and average compostable content 13 times larger in 2019 than 2018, albeit only to 3%.

2019 Target setting

Among companies that have shared that they are monitoring some form of their plastic packaging usage (the 27% above), we see the most popular target being set by companies relates to use of recyclable material, with a third of companies doing so. This is followed by a recycled content target, shared by a quarter of companies. Only 7% of companies set a compostable target.

2019 Performance

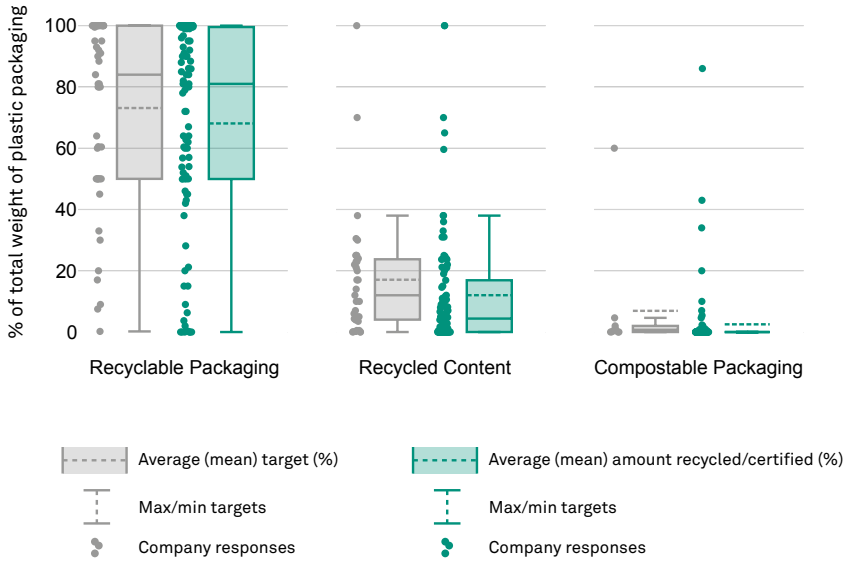
When comparing the average 2019 targets set by companies against the average percentages achieved during 2019, we observe the following:

- Use of recyclable packaging stands out as the area where companies have focused their attention, both regarding the average target for recyclable packaging, which reaches almost 75%, and a general higher average performance.

- Although we see companies aiming for an average recycled content target of 17%, average current realisation rates cluster lower on the scale at 12%.

- Compostable packaging remains a topic with predominantly low target setting, and even lower average performance, despite a few companies reporting high percentages in this area.

Figure 6: Average Achieved Content Included vs Average Target Content (2019)

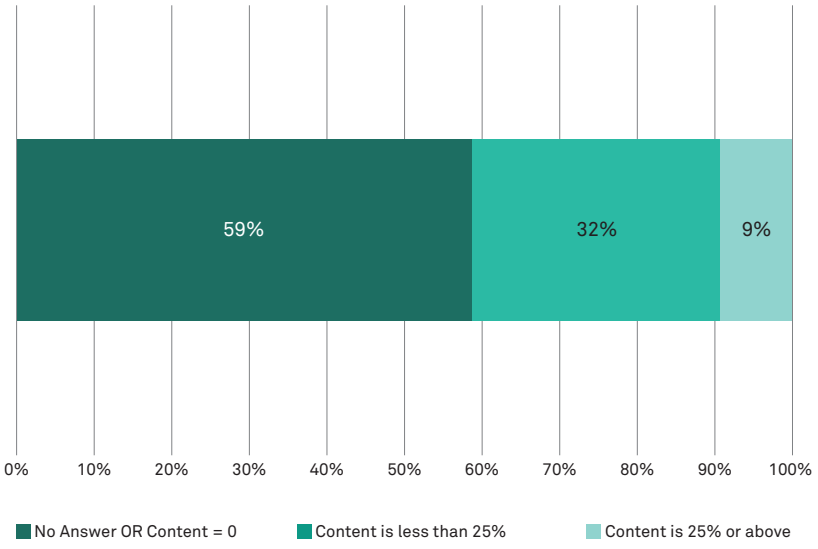


Source: SAM CSA 2020; data considers 142 companies who are monitoring their packaging materials and their covered operations.

Recycled content: Preparedness

When we consider company preparedness for the upcoming legislation, such as the *25% recycled content by 2025* that the EU and some US states have passed, we observe that in 2020, the percentage of companies currently above the 25% target inclusion rate is less than 10%, leaving nine out of ten companies seemingly unprepared:

Figure 7: Company Inclusion of Recycled Content (2019)



Source: SAM CSA 2020; Data based on 142 companies actively monitoring their performance and their covered operations.

However, if we refer back to Figure 6, between 2018 and 2019 we saw companies reporting an increase of 30% in recycled content included; if this rate of increase is maintained over the next five years by those currently monitoring, this would bring the proportion of companies who are prepared close to a third. However, this does not take into account the future performance of those who did not disclose data in 2019.

Packaging commitments

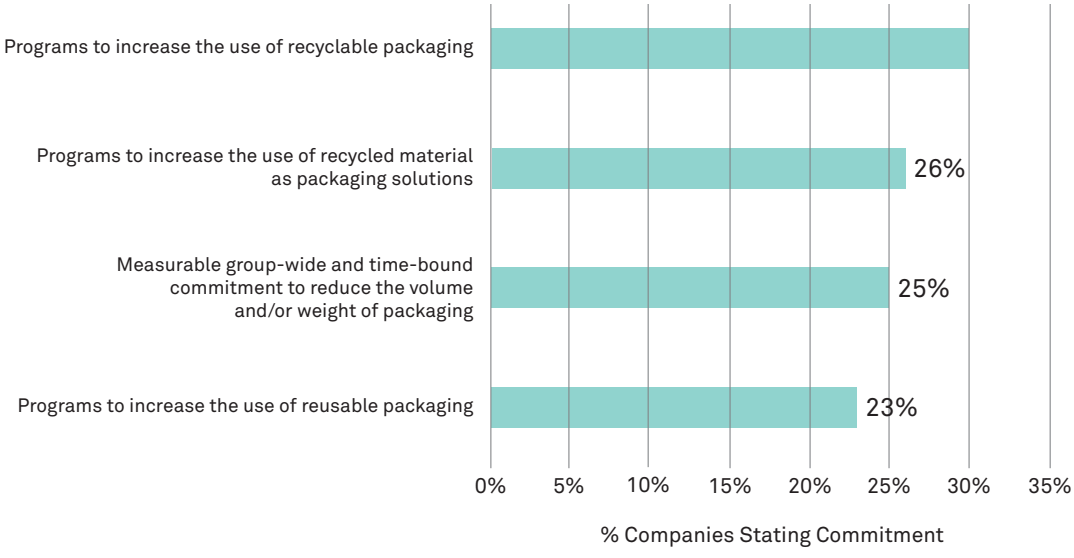
In 2020 we wanted to take a deeper look at what companies are publicly committing to regarding their packaging strategy and which solutions companies are favouring moving forward. The new Packaging Commitments question requests information on commitments across seven different areas, including single-use elimination, R&D spend and the use of recycled content.

We found that just over 50% of the 525 companies assessed are addressing at least one environmental aspect publicly in their strategy and giving examples of implementation of that commitment. Given the global consumer, government and investor focus on this topic, it seems surprising and risky that such a high number percentage of companies are choosing not to share their commitments and programs publicly.

Packaging Composition

Considering packaging-composition-related commitments, we see that the use of recyclable packaging is the favoured commitment, stated by 30% of companies assessed. Increased inclusion of recycled content and packaging reduction were chosen by approximately a quarter of respondents, with programs to increase the use of reusable packaging following closely behind:

Figure 8: Composition-related commitments (% companies stating this commitment)



Source: SAM CSA 2020; Graph shows % of respondents, based on 525 responses by both companies actively participating in the CSA as well as those assessed on publicly-available information. Commitments must be public. Companies select all answers that apply.

– Considering the upcoming regulation on recycled plastic content quotas, it is surprising that only 26% of companies are publicly stating that this forms part of their packaging strategy and sharing details of programs they have in place. A lack of industry-wide adoption of this practice will expose companies to risks when faced with legislation such as the EU plastic packaging tax.

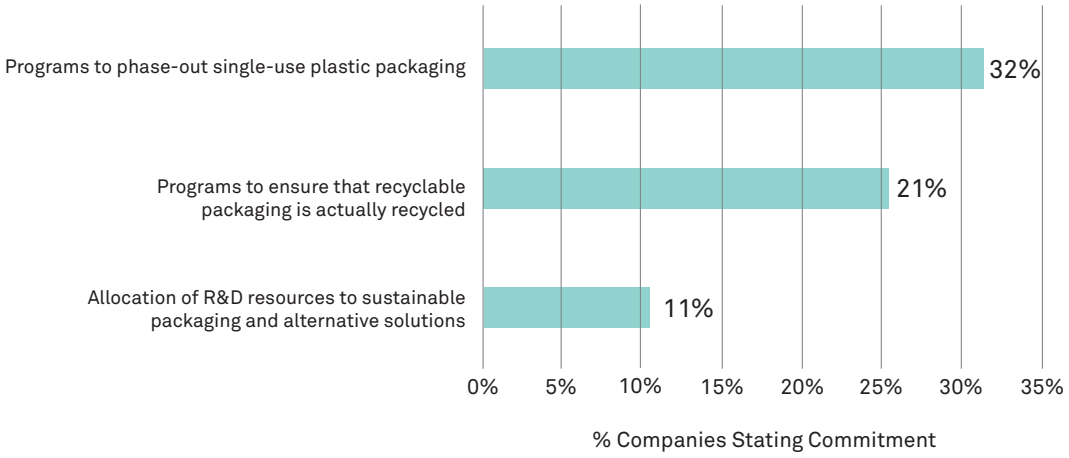
– Equally, much stronger commitments to the removal of unnecessary packaging and overall packaging reduction are needed from companies in order to stop our current flow of mismanaged plastic waste.

– The low number of companies stating their commitment to reusable packaging is a missed business opportunity, as laid out by the Ellen MacArthur Foundation below.

Packaging Strategy

Considering more strategic related packaging commitments, we see varied levels of adoption amongst companies assessed:

Figure 9: Strategy-based packaging commitments (% companies stating this commitment)



Source: SAM CSA 2020; Graph shows % of respondents, based on 525 responses by both companies actively participating in the CSA as well as those assessed on publicly-available information. Commitments must be public. Companies select all answers that apply.

– It is not surprising that programs to phase out single-use plastic packaging are the most commonly stated commitment, not only due to the intense media attention that the topic of single use has received, but also as this area may offer common easy wins for companies (removal of single-use plastic bags, straws etc). However, once bans on these single-use items become more commonplace, we will see if companies translate this into a reduction of general unnecessary single-use packaging and an increase in reusable models.

– Aside from increasing the amount of recycled content within their own packaging, companies have a responsibility to ensure that packaging made with recyclable materials ends up in an appropriate recycling facility. Currently only a fifth of companies are committed to these programs, which highlights a need for more collaboration industry-wide and with governments and local authorities to ensure implementation of deposit return schemes (DRS) (currently popularly implemented in countries such as Germany, Norway and Sweden and planned for the UK).

– The least popular category among the commitments is the allocation of R&D resources to development in this area; only one in ten companies gave public examples of commitments, implying a general preference for existing – rather than development of new – solutions.

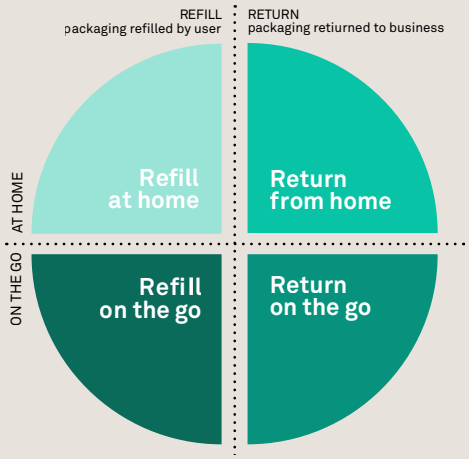
Reuse as a business opportunity

Reuse models have recently gained momentum in the world of packaging, driven by increasing recognition of their potential to both reduce plastic waste and pollution, and unlock significant business benefits.

The innovation opportunity around shifting to reusable packaging is estimated to be worth more than USD 10 billion.[34] By leveraging digital technologies and aligning with shifting user preferences, reuse can help to reduce costs of production and transport, adapt products to individual customer needs, optimise operations, build brand loyalty, improve user experience, and gather consumer intelligence.

The four business-to-consumer reuse models

Reusable packaging is designed to be used multiple times, for its originally intended purpose, as part of a dedicated system for reuse. There are four different business-to-consumer reuse models:[35]



Refill at home: Users refill their reusable container at home – for example, with refills delivered through a subscription service.

Refill on the go: Users refill their reusable container away from home – for example, at an instore dispensing system.

Return from home: Packaging is picked up from home by a collection service –for example, by a logistics company.

Return on the go: Users return the packaging at a store or drop-off point – for example, in a deposit return machine or a mailbox.

In addition to these business-to-consumer models, a variety of business-to-business reuse models exist. These range from individual companies reusing their own transport packaging to industry-wide reuse systems where reusable packaging is standardised.

Businesses' approach to reuse models

The growth in the number of reuse-focused pilots, commitments, research initiatives, and start-ups launched over the past two years is proof of the increasing interest in reusable packaging models.

The overall proportion of packaging designed to be reusable remains low – just 1.9% of plastic packaging put on the market by Global Commitment signatories in 2019 was reusable.[36] However, examples of substantial existing reuse-based businesses are provided by FMCG giants The Coca-Cola Company, which delivers 23% of its overall global sales volumes through reuse and packageless models, and Danone S.A., which delivers approximately 50% of its plain water business volume via reusable containers and jugs.[37]

[34] Ellen MacArthur Foundation (2020), "Upstream Innovation: A guide to packaging solutions"

[35] Ibid, see 28

[36] Ibid, see 28

[37] Ibid, see 28

Many businesses are working to test and implement reuse models across their portfolios and markets. We are seeing a particular focus on refill models among businesses in the household, personal care, and cosmetics sectors – both refill on the go, through bulk dispensers, and refill at home, through concentrated and compact refills. SC Johnson, for example, now offers refillable cleaning products that account for 17% of its total packaging weight, while Natura Cosmetics is aiming to expand availability of refill options to cover 50% of all product lines by 2025 (up from 10% today). Food applications are also a growing area of focus, with 20% of businesses in the Global Commitment identifying this as an opportunity for future expansion of reuse efforts.[38]

An increasing trend is the use of smart dispensers to improve safety and hygiene of refill systems. Start-ups such as EcoCarga, Algramo and MIWA are working with sensors that recognise when a package is in place, automatically dispense the required quantity, register product information, and facilitate cash-free payments.

Progress at scale on reuse requires fundamental changes to packaging and delivery models which take time to create, test, and scale. Looking ahead, the large number of businesses investing in piloting reuse solutions points to growth to come. 39% of signatories to the New Plastics Economy Global Commitment had reuse pilots in progress over the 2019 reporting year, with a further 17% reporting plans to deliver pilots going forward.[39] While this is positive, we will need to see businesses further increase their level of ambition, attention, and investment in reuse to trigger a significant shift over the next few years.

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Conclusion

The topic of packaging will only continue to grow in importance, for companies, consumers, governments, and investors, presenting both risks and opportunities along the way. Risks remain highly regulatory and reputational, but opportunities exist for proactive companies to attract the attention of investors.

The 2020 CSA highlighted that currently only a quarter of companies are actively monitoring their performance regarding their plastic and other raw material packaging. Among those who are monitoring, not only do we see a low percentage of companies setting targets, but that those targets need to be more ambitious – particularly concerning recycled content – to face regulatory change and solve our current packaging dilemma.

The use of recyclable material is currently the most employed method of companies in ensuring circularity of systems, and one of the most common public commitments moving forward. However, companies will need to pay more attention to other solutions, to ensure that they can adapt to the optimum solution for each location and market, and reap the different benefits that each solution offers. ■

[38] Ibid, see 28

[39] Ibid, see 28

The way forward

With regulatory and public pressure around use of plastics continuing to mount and the approach of 2025 target deadlines, we expect progress towards a circular economy for plastic packaging to accelerate in the coming years.

Businesses representing more than 20% of global plastic packaging volumes are now aligned behind a common vision of a circular economy for plastics and working towards ambitious 2025 targets through the New Plastics Economy Global Commitment.[40] Among this leading group of businesses, we are already seeing strong growth in recycled content (increasing 22% between 2018 and 2019), alongside widespread phase out of a number of problematic materials and testing of reuse models.[41] Growing adoption of overall plastic or virgin plastic packaging reduction targets should also drive a step change in efforts to design out the need for single-use packaging in the coming years.

However, progress is not universal, and a substantial acceleration will be needed in several areas in order to achieve 2025 targets. In particular, a significant proportion of businesses are yet to set – or demonstrate progress against – targets to increase recycled content and recyclability of packaging, while current investment by businesses in more innovative efforts to design out the need for packaging altogether and shift to reuse models is insufficient.

In light of this, the Ellen MacArthur Foundation and UN Environment Programme have called on industry to:[42]

1. Take bold action on packaging types that are not recyclable today — either developing and executing a credible roadmap to make recycling work, or decisively innovating away from these packaging types.

2. Set ambitious plastic packaging reduction targets — aimed at helping to mobilise increased efforts to rapidly scale innovative new delivery models that deliver products to customers without packaging, or by using reusable packaging.

Industry cannot deliver the shift to a circular economy for plastics alone. It will need the support of policymakers putting in place the enabling conditions, incentives, and frameworks to create a circular economy for plastic,[43] both domestically and internationally through a Global Treaty on plastic pollution.[44]

The Covid-19 pandemic has shone a new light on the drawbacks of our linear economy, emphasising the urgent need to rethink how we produce, use, and reuse plastics. We have seen, for example, rocketing demand for takeaway food containers and bubble wrap – most of it not recyclable – and the halting of policies aimed at reducing single-use plastic products. However, this crisis has also demonstrated the speed at which the world can mobilise change, and post-Covid-19 economic recovery plans present an opportunity to take this necessary action on plastic pollution.[45]

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[40] Ibid, see 28

[41] Ibid, see 28

[42] Ibid, see 28

[43] The Ellen MacArthur Foundation and UN Environment Programme have called on policymakers to: (1) Establish policies and mechanisms that provide dedicated and stable funding for collection and sorting, through fair industry contributions, such as extended producer responsibility; and (2) Set a global direction and create an international agreement and framework for action, through the UN Environment Assembly, building on the vision of a circular economy for plastics.

[44] Ibid, see 3