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JABIL

SUSTAINABLE PACKAGING TRENDS

*A Survey of Packaging and
Sustainability Stakeholders*

JANUARY 2022

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SIS INTERNATIONAL
RESEARCH™

INTRODUCTION

You need not do more than turn on the TV, open a social media network or—depending on where you live—look outside to be reminded that what we discussed as “global warming” 15 or 20 years ago has progressed to a climate crisis. Despite the brief dip created by the global COVID-19 lockdowns in 2020, global greenhouse gas emissions were expected to rebound to near record-highs in 2021 as consumption rose to new levels.

An October 2021 U.N. Environment Programme Report found that plastic pollution in the world’s oceans and waterways is growing and could double by 2030 if that growth isn’t slowed. The United States is the leading contributor to global plastic waste, with a 2021 National Academy of Sciences study finding the country creates an average of 287 lbs. of plastic per person each year.

Sustainable packaging solutions are an imperative, not a maybe. And they’re needed as soon as possible.

It will take participation from everyone in the ecosystem—brands, governments, consumers, manufacturers and more—to make actual, lasting change and move toward a circular economy. Though there are certainly challenges for brands to deliver on these sustainable solutions, there are also plenty of opportunities.

With a wealth of knowledge at their fingertips, consumers have become savvy and discerning. They understand the need for materials with responsible end-of-life plans, and they can tell the difference between a company that is committed to sustainability and one that is putting on airs. Recognizing this, brands have begun publicly detailing the steps they’re taking to reduce plastic, cut their carbon footprints, increase recyclability and more.

In a follow-up to our 2019 report that captured hard data on plans, challenges and opinions around sustainable packaging, Jabil partnered with SIS International Research to field an online survey to 186 packaging decision-makers. Participants came from a variety of industries, including food and beverage, pet care, personal care, home care and industrials. The survey posed a range of questions about sustainability progress and goals as well as specific approaches to achieve sustainable packaging.

KEY FINDINGS

THERE'S NO SHORTCUT TO SUSTAINABILITY

- Almost all **(98%)** of respondents have taken action toward sustainable packaging, a **20%** increase from Jabil's 2019 sustainable packaging survey.
- Three factors are driving brands to develop sustainable packaging: genuine concern for the environment, protecting brand reputation and consumer demand.
- Companies' sustainable packaging goals are to keep up with consumer trends **(65%)**, reduce their contribution to ocean plastics **(59%)**, manage public perception of the brand **(54%)**, incorporate post-consumer content into their packaging **(54%)** and reduce their use of single-use plastics **(53%)**.
- Companies are working to implement paper-based packaging **(68%)**, implement reusable packaging **(53%)**, increase the recyclability of their current packaging portfolio **(50%)**, incorporate post-consumer recycled (PCR) materials **(48%)** and incorporate the use of biodegradable or compostable materials into their packaging **(48%)**.
- Of those efforts, companies are prioritizing the implementation of paper-based packaging **(49%)**, the incorporation of biodegradable or compostable materials **(42%)** and increasing the recyclability of their current packaging portfolio **(38%)**.
- Less than half of companies **(41%)** have clearly defined sustainable packaging goals with measurable targets.

KEY FINDINGS

THERE'S NO SHORTCUT TO SUSTAINABILITY

- More than a quarter (**26%**) have clear targets, but those targets have no associated success metrics. Roughly the same number (**27%**) have vague intentions with no targets, while **6%** have not set any goals at all.
- Almost all companies (**97%**) with clearly defined sustainable packaging goals say they will “definitely” or “probably” meet them.
- The majority of food and beverage (**60%**) and industrials (**58%**) said they would “definitely” meet their sustainability goals, showing the highest confidence levels of all industries.
- A lack of internal expertise (**49%**) and a lack of management, leadership and budget (**41%**) are the biggest challenges to meeting sustainable packaging goals.
- **64%** of home care companies indicated that they face challenges to meeting their sustainable packaging goals.
- More than two-thirds of companies have made public statements about sustainability, but only **36%** contained clear commitments to sustainability.
- Nearly three-quarters (**72%**) of packaging teams are excited by the challenge of creating sustainable packaging solutions.

KEY FINDINGS

SUSTAINABLE PACKAGING CHALLENGES

- More than **60%** of companies face challenges in delivering sustainable packaging.
- Regulation and compliance is the most difficult challenge for companies to address, holding steady from the 2019 survey.
- More than two-thirds (**67%**) of companies are turning to partners for expertise to address their sustainable packaging needs, up from **52%** in 2019.
- Nearly one-third (**32%**) of companies would consider a slightly lower level of product protection in order to gain sustainability advantages, up from **19%** in 2019.
- However, **71%** of food and beverage, **79%** of home care and **90%** of industrial brands said any sustainable packaging option must include equal or greater product protection as non-sustainable options.

KEY FINDINGS

SUSTAINABLE PACKAGING CHALLENGES

- Companies chose reusable packaging as the ultimate solution to sustainable packaging (**37%**), followed by paper-based packaging (**31%**) and compostable packaging (**23%**).
- Consumer packaged goods brands found reusable packaging particularly favorable, with **50%** of home care and **48%** of personal care companies selecting that option as the ultimate solution to sustainable packaging.
- Less than a third (**29%**) of companies always calculate the carbon impact of products when evaluating carbon impacts.
- Companies believe replacing plastic with other materials, the implementation of compostable packaging and innovation in mechanical and chemical recycling centers will have the biggest impact on the environment. However, they believe compostable packaging and post-consumer recycled resins can be implemented most effectively.
- Compostable (**52%**) and non-food grade PCR (**50%**) resins are playing the most significant roles in companies' sustainable packaging solutions.

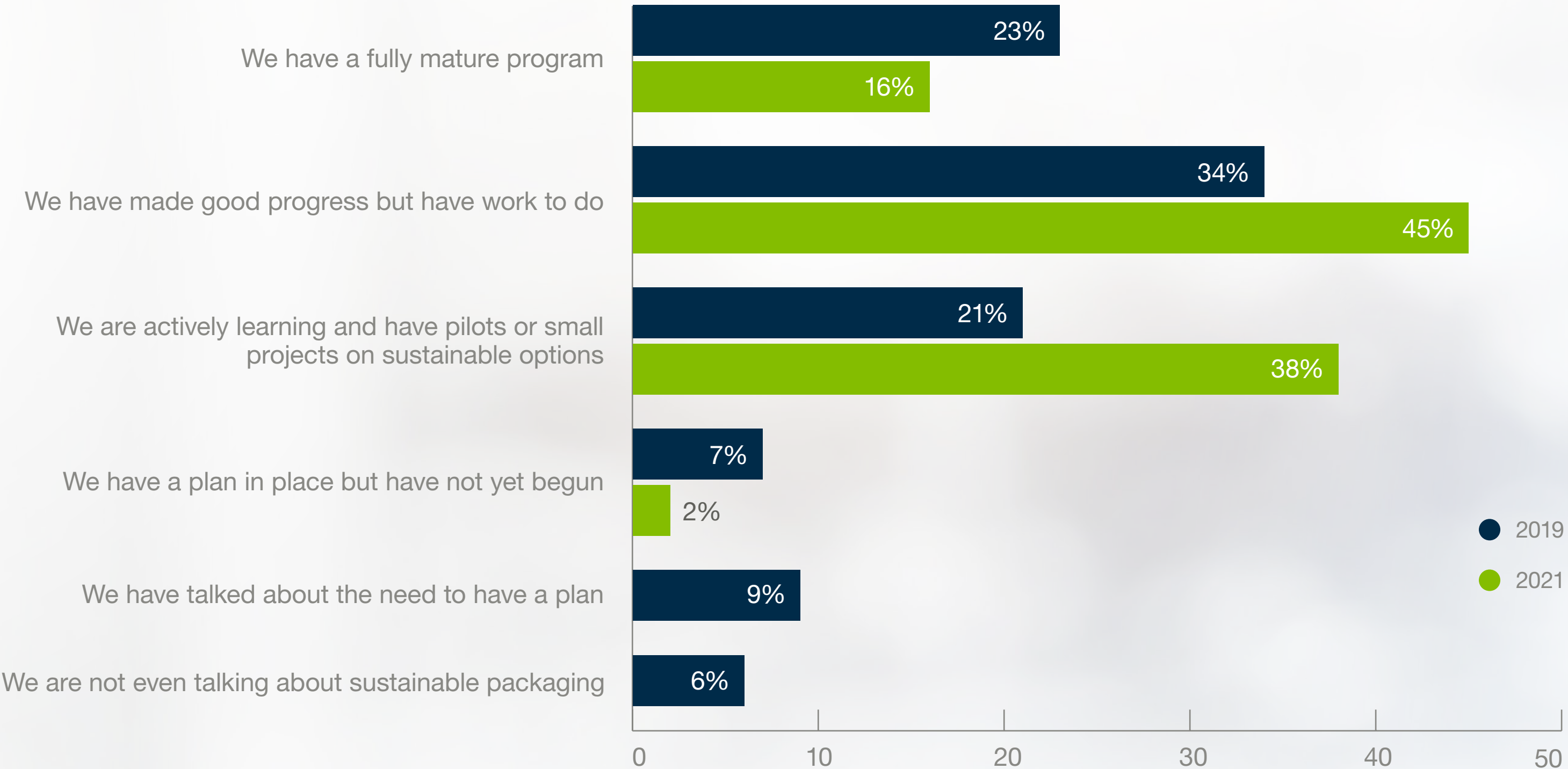
**As you review the results, please keep in mind that not all percentages may add up to 100 due to rounding.*

THERE'S NO SHORTCUT TO SUSTAINABILITY

MORE COMPANIES ARE IMPLEMENTING SUSTAINABILITY PLANS

While fewer companies reported having a fully mature sustainable packaging program in 2021 than in 2019, more reported actionable progress on sustainable packaging overall. In 2021, 98% of respondents said they had at least piloted a sustainable packaging option, compared to 78% of 2019 respondents.

How would you characterize your company's current progress on sustainable packaging?



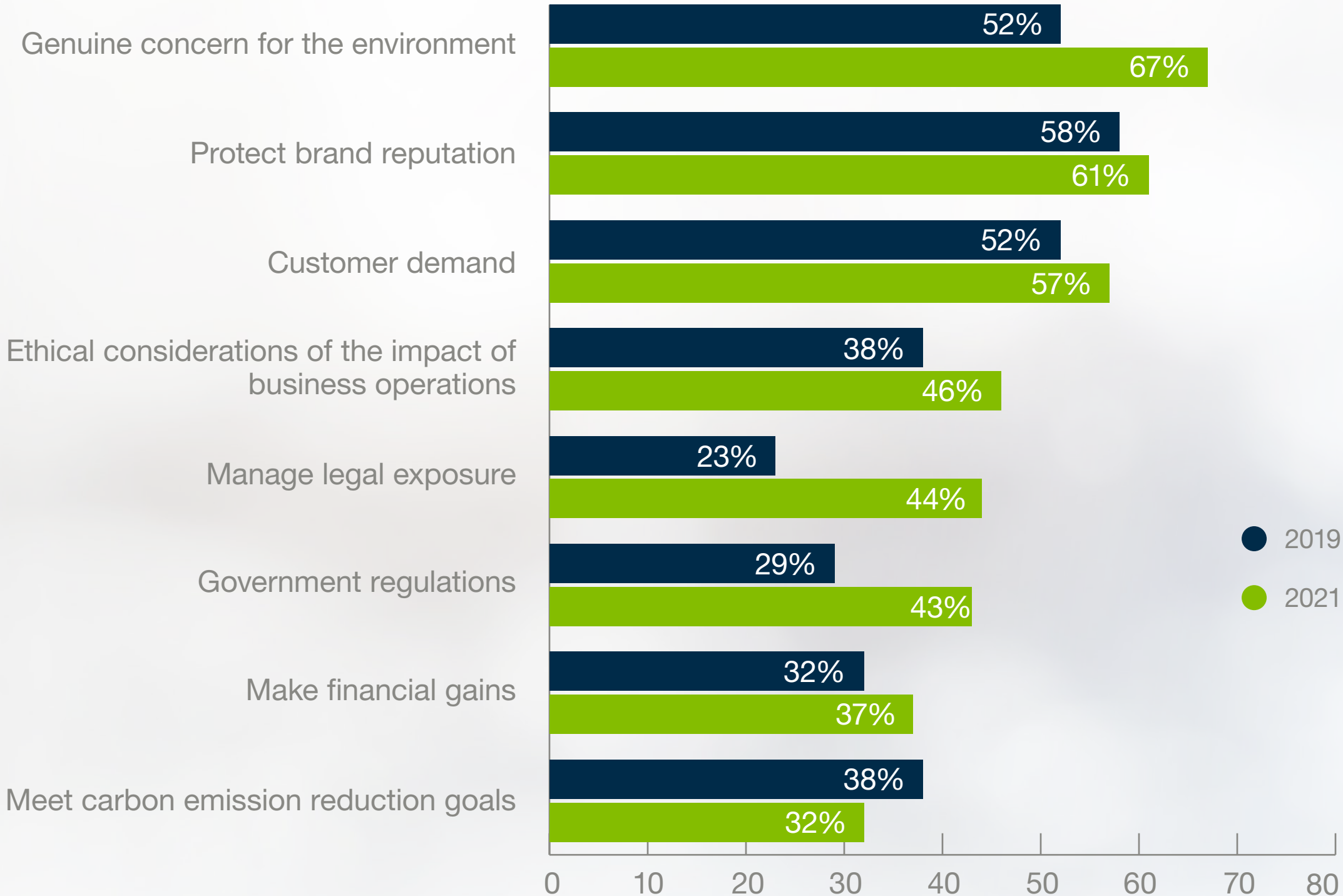
ENVIRONMENTAL AND BRAND CONCERNS DRIVE THE DEVELOPMENT OF SUSTAINABLE PACKAGING

Undoubtedly influenced by alarming climate change reports that indicate we are rapidly approaching a “code red” for humanity, genuine concern for the environment jumped to the top motivating factor for delivering sustainable packaging in 2021. Respondents from each industry ranked the environment as a top consideration.

In turn, companies are publicly committing to reducing their impact on the planet—partially through their use of plastic. In 2018, the Ellen MacArthur Foundation launched the New Plastics Economy Global Commitment intended to eliminate or reduce unnecessary plastic; apply reuse models; make all plastic 100% reusable, recyclable or compostable by 2025; ensure all plastic is reused, recycled or composted; decouple the use of plastic from the consumption of finite resources; and ensure plastic packaging is free of hazardous chemicals.

A progress report from the commitment’s 500-plus signatories in November 2021—representing 20% of all plastic packaging produced globally—shows that the use of virgin plastic is set to drop 20% worldwide by 2025 (compared to 2018 levels), aligning with customers’ growing demands for recycled and recyclable packaging. For a brand to have a positive consumer sentiment, sustainability is a must-have at this point.

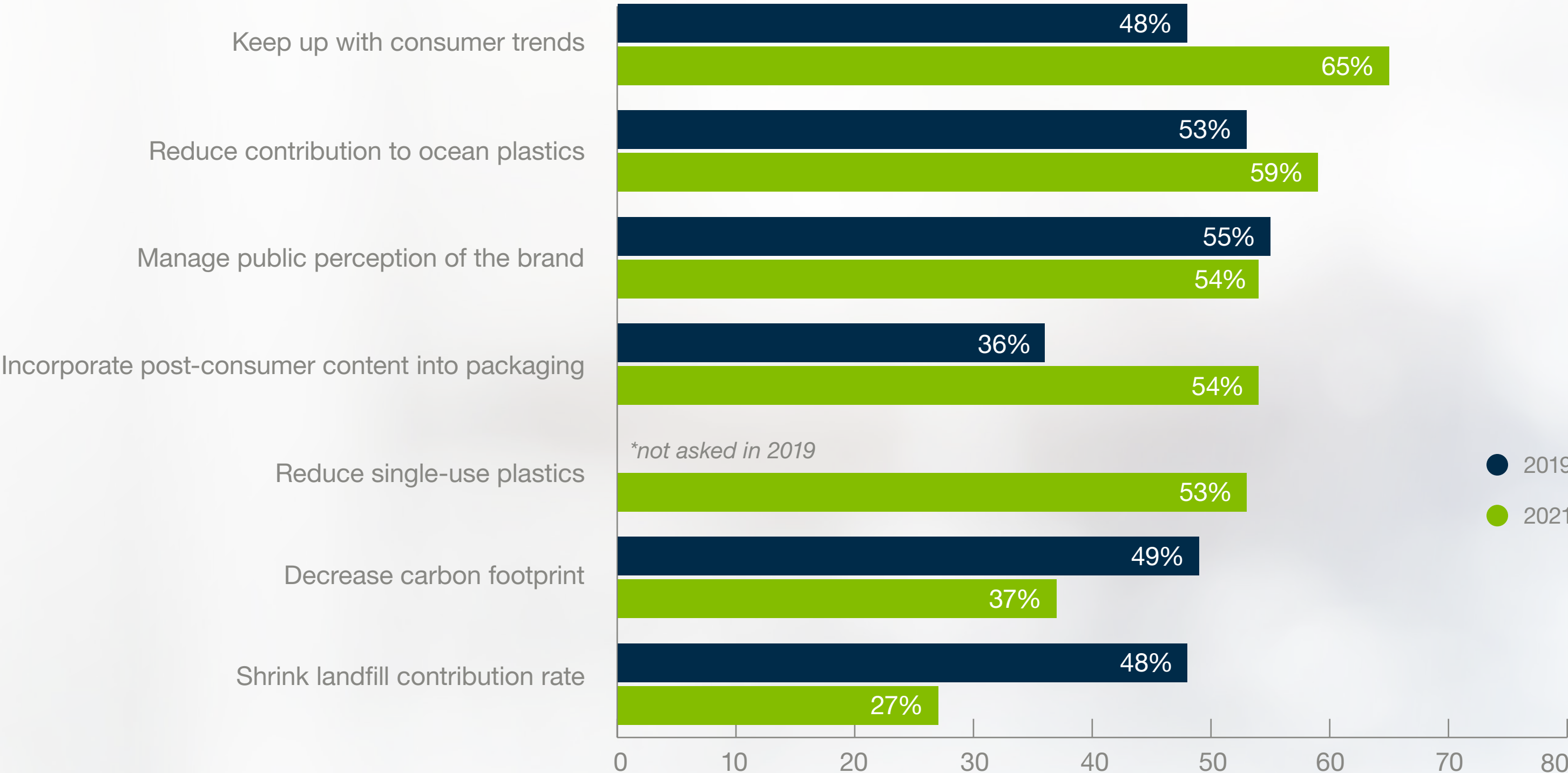
What is motivating your company to deliver sustainable packaging?



PACKAGING GOALS AND MOTIVATIONS ALIGN

Again, the demands of consumers, brand perceptions and environmental pressures are driving the goals of sustainable packaging programs. Between 2019 and 2021, respondents have shifted some focus to reducing their use of plastics and incorporating post-consumer content into packaging, both of which could decrease their carbon footprint and shrink their landfill contribution rate—potentially explaining why fewer respondents chose those answers in 2021.

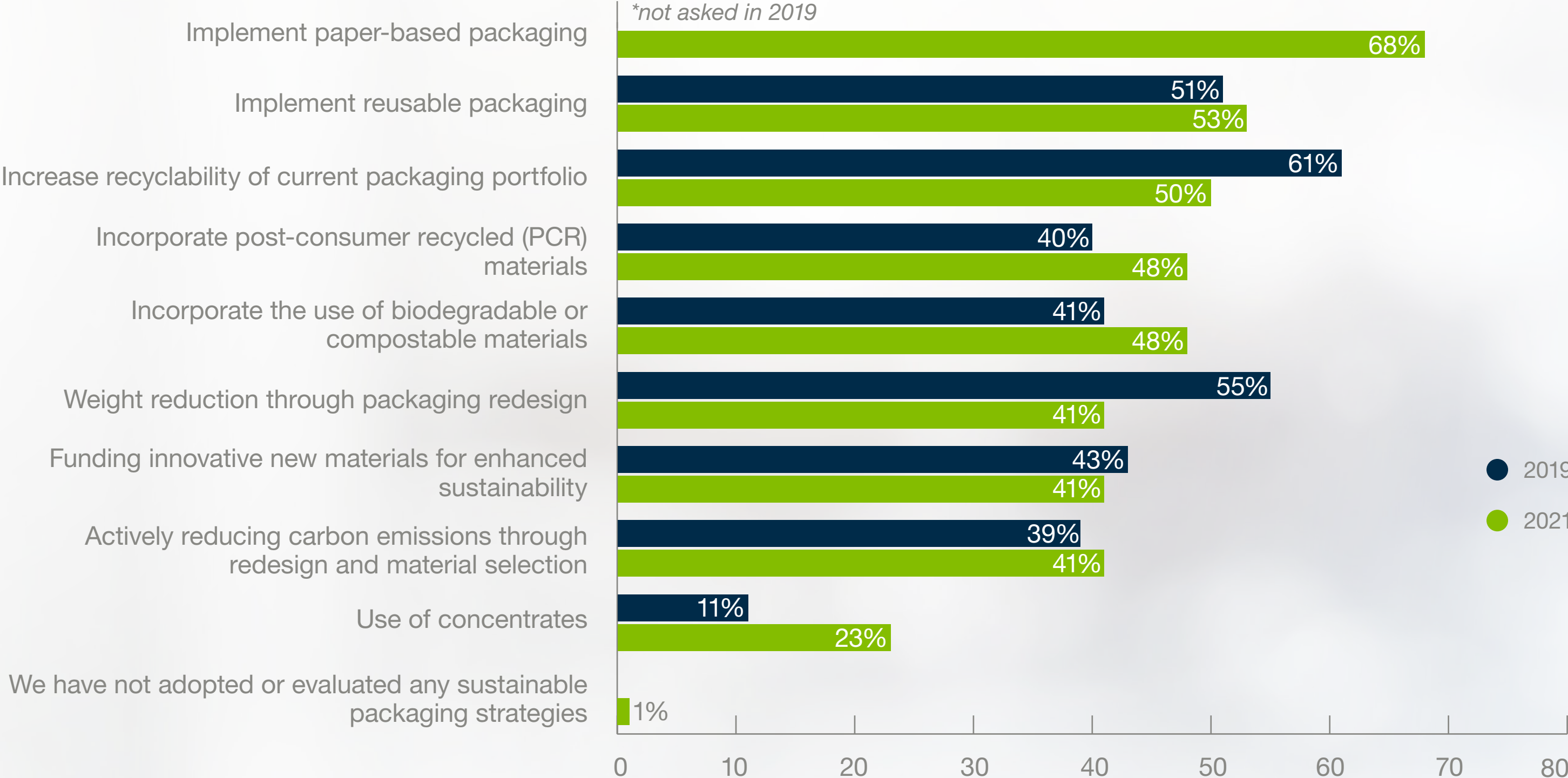
What are the goals of your sustainable packaging program? Choose all that apply.



MOST PRODUCT INITIATIVES CONSIDER NEW SUSTAINABLE MATERIALS WHILE RE-EVALUATING THE ROLE OF PLASTIC

While half of the companies are looking to increase the recyclability of their current packaging portfolio, many are also considering changing the status quo. Industries across the board are showing interest in at least evaluating paper-based packaging for their programs. Paper and paper board are simple to create and recycle, making them the most-recycled materials in the United States each year. Paper's organic nature, as well as its ability to be reprocessed into new packaging materials, appeals to eco-conscious consumers. Food and beverage (64%), home care (62%) and industrials (57%) also showed strong interest in reusable packaging. Tying into their goals to reduce environmental impact and the use of single-use plastics, nearly half of companies are adopting or evaluating post-consumer recycled materials and compostable materials.

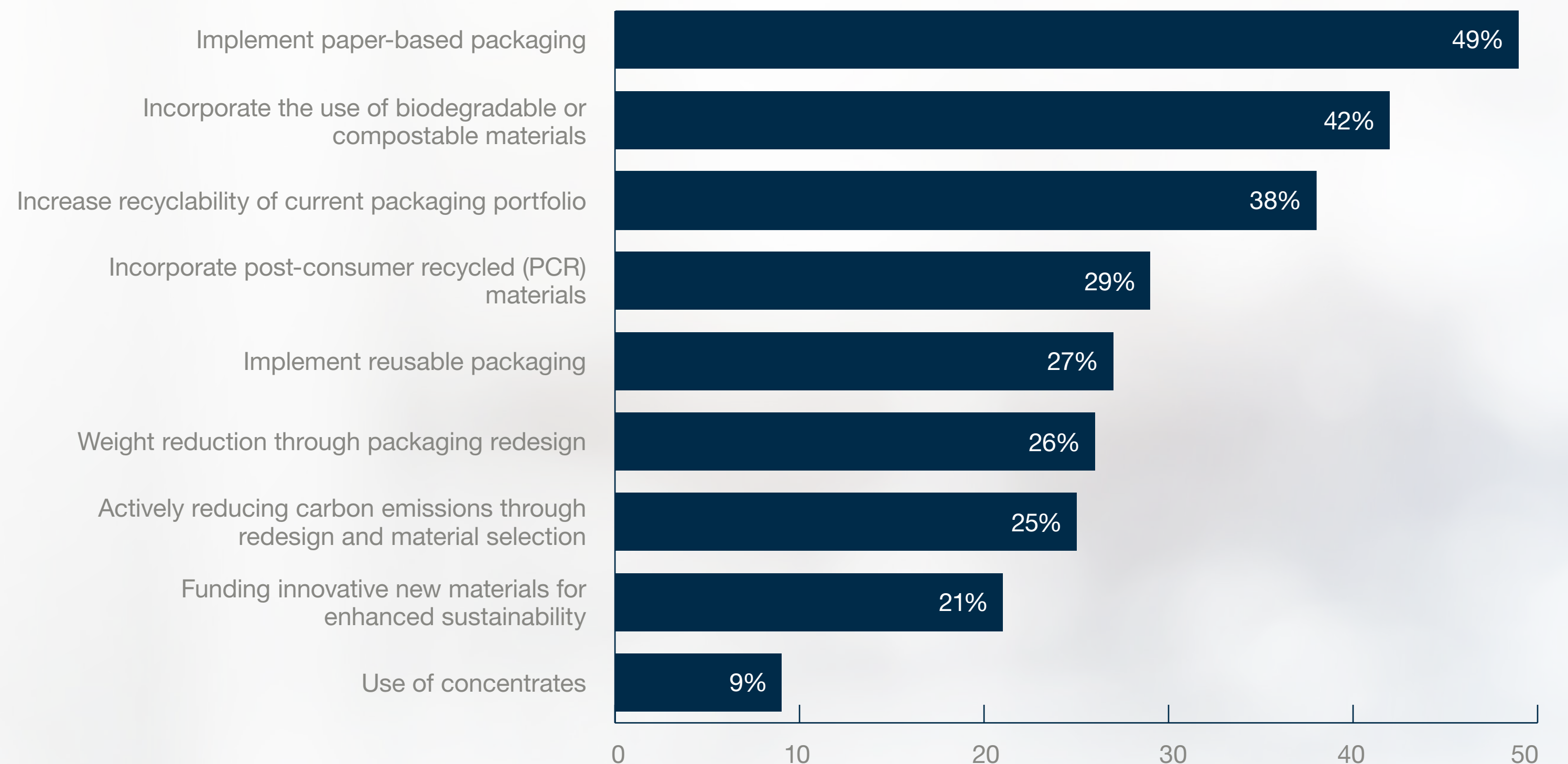
What product-level initiatives is your company adopting or evaluating for your sustainable packaging program?



COMPANIES ARE PRIORITIZING SUSTAINABLE MATERIALS

Companies are putting their efforts behind packaging options that can be recycled or composted by consumers. Respondents from all industries showed interest in compostability, including food and beverage. While food and beverage packaging and compostability might have been considered mutually exclusive in the past, 48% of industry respondents named it the highest sustainable packaging priority; only 30% said the same for increasing recyclability of the current portfolio.

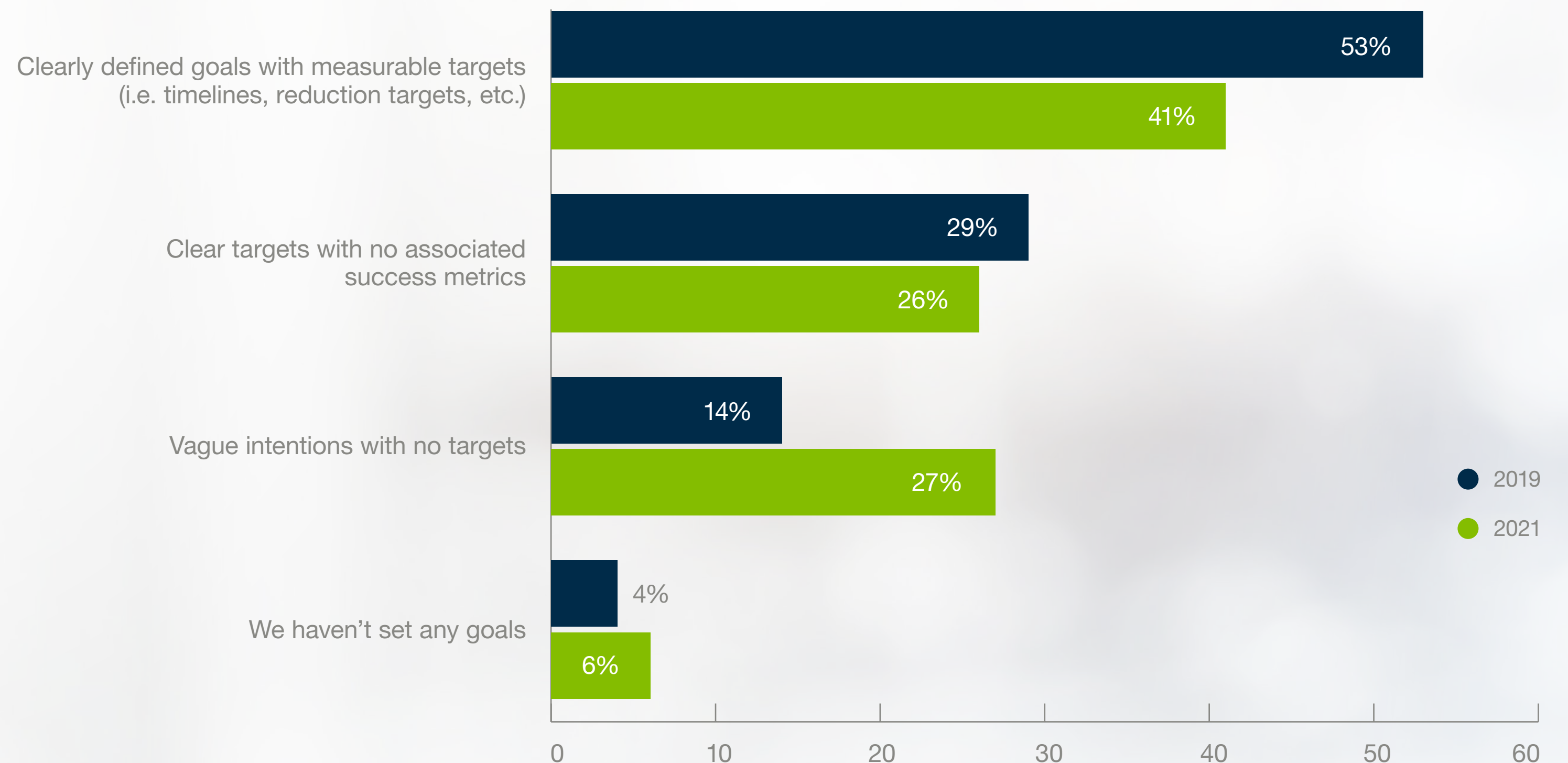
Which of the parts of your company's sustainable packaging program are your HIGHEST priority?
Choose up to 3 of the following.



FEWER COMPANIES ARE QUANTIFYING THEIR SUSTAINABILITY GOALS

While nearly all the surveyed companies have some sort of sustainable packaging goals, most have not made those targets clear. Less than half said they have a sustainability plan with measurable goals, down from 2019. Also, the number of companies who said their sustainable packaging intentions are “vague” nearly doubled between 2019 and 2021, rising from 14% to 27%.

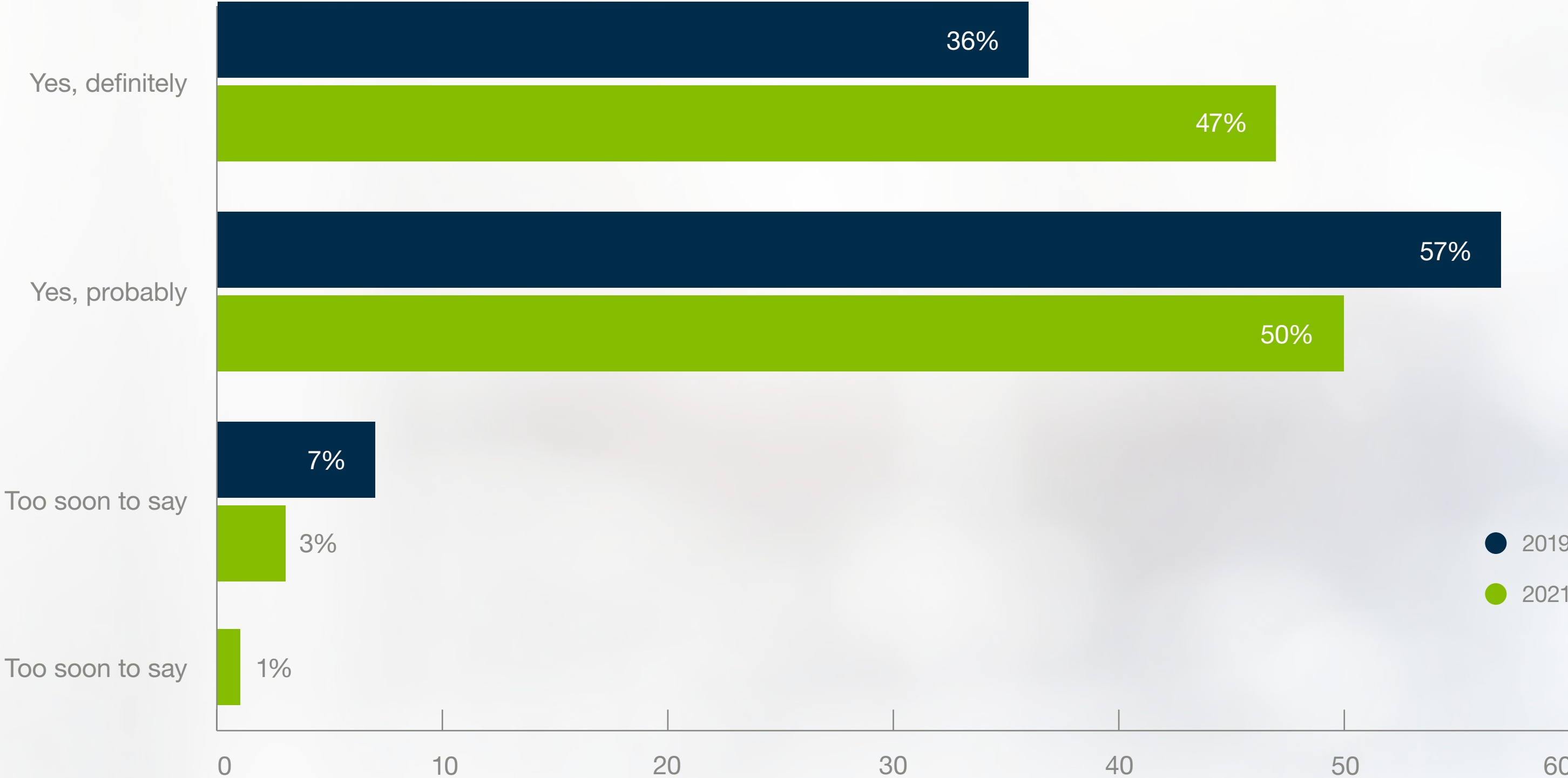
How would you characterize the internal goals your company has established for your sustainable packaging goals?



CONFIDENCE IN SUSTAINABILITY GOALS IS HIGH

Even if their goals are a work in progress, the majority of companies feel confident they can reach their goals. Promisingly, the number who think they will definitely meet their sustainable packaging goals has jumped from one-third to nearly one-half. Goals that incorporate new materials, as responses to previous questions have indicated, could slow the rollout of new sustainable packaging and thus influence confidence levels.

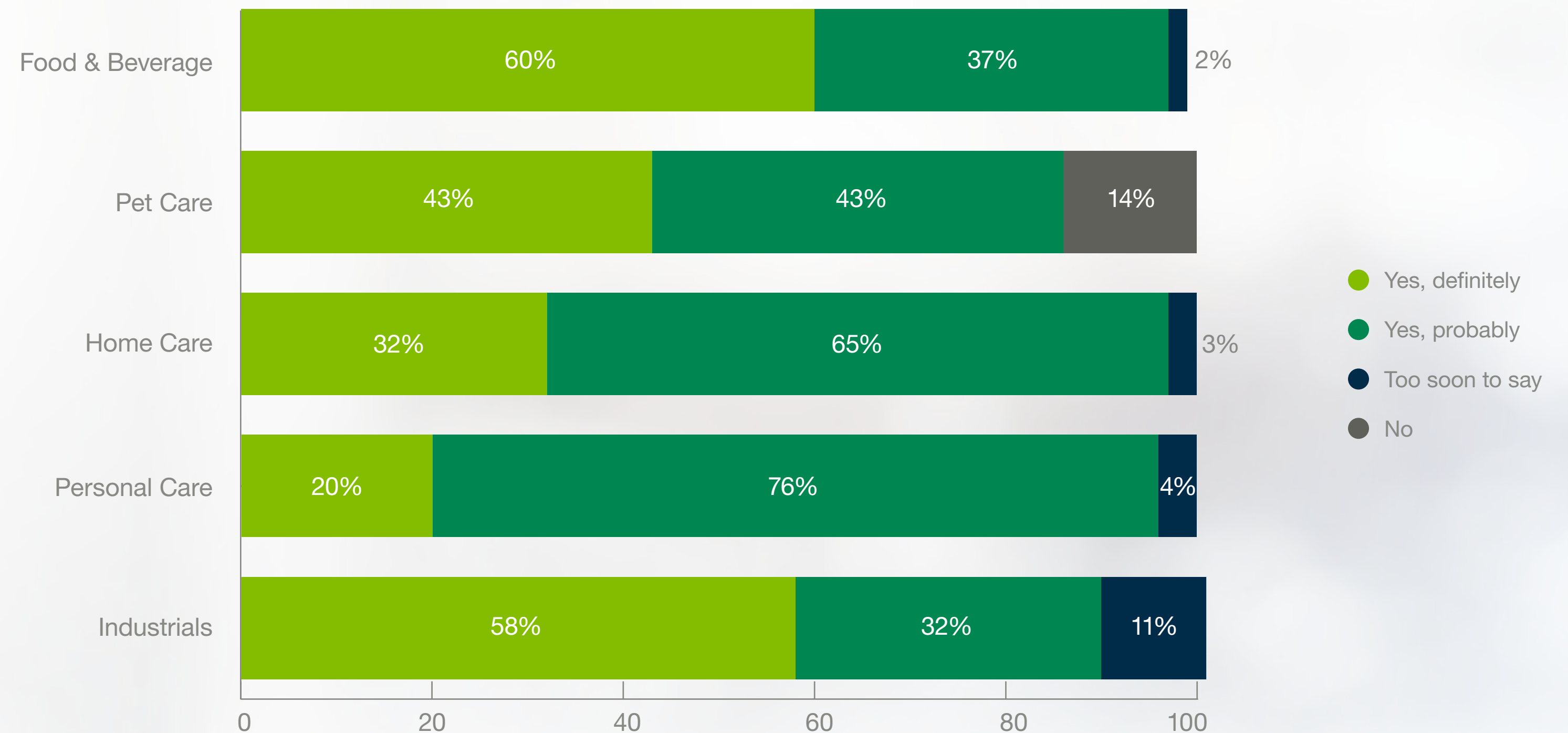
In your opinion, can your company meet your sustainability goals or intentions?



CONSUMER BRANDS ARE MOST CONFIDENT IN THEIR SUSTAINABLE SOLUTIONS

Food and beverage brands were most confident that they would meet their goals, with 60% of respondents saying they would “definitely” meet their goals. Home care and personal care brands overwhelmingly said they would “probably” meet their goals, at 65% and 76%, respectively. As these products are among the most-used by consumers, they are also the quickest to respond to trends and customer demands. They are also more likely to have the capital to put behind innovation and new systems.

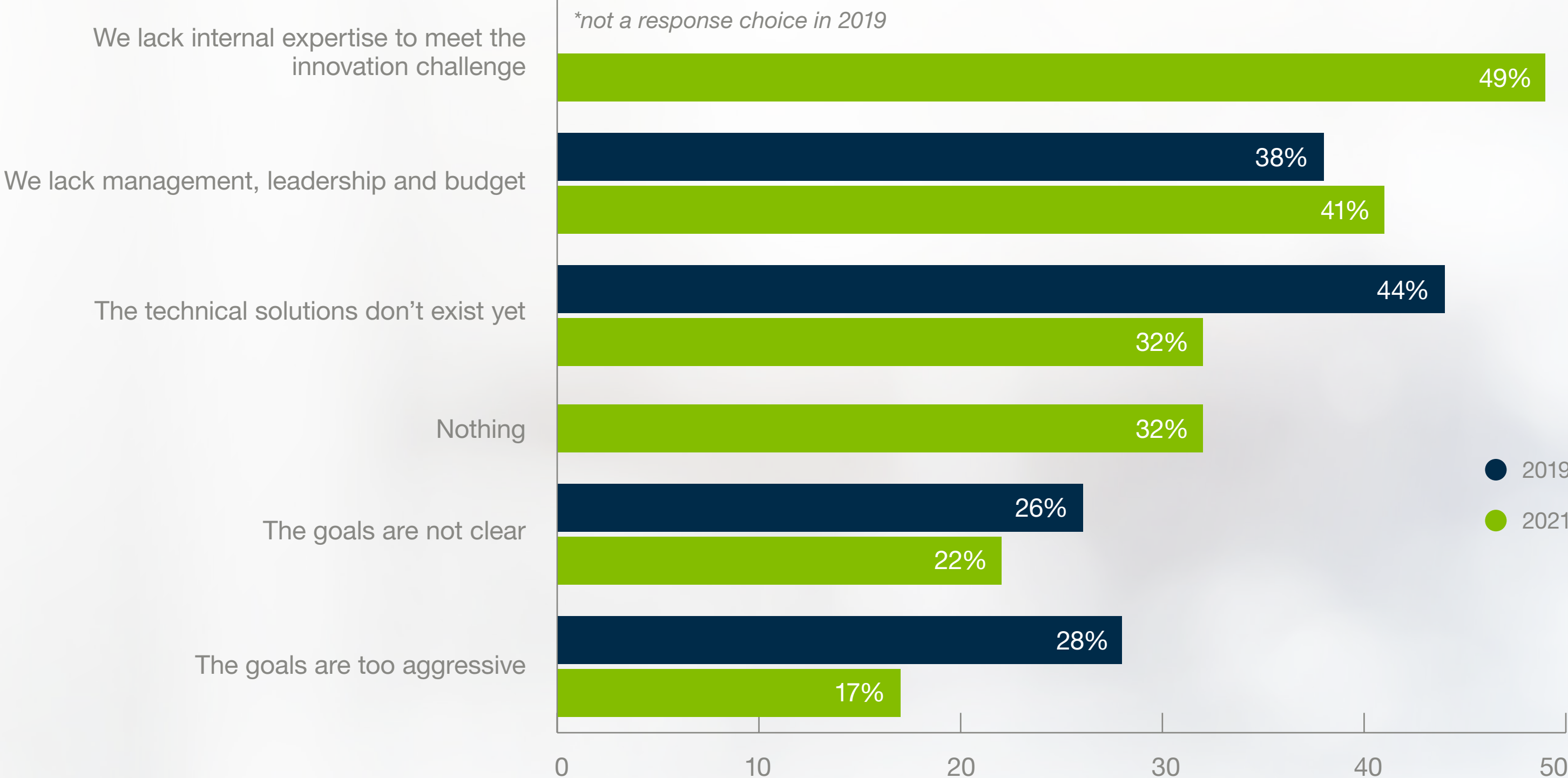
In your opinion, can your company meet your sustainability goals or intentions? By industry



LACK OF EXPERTISE AND LEADERSHIP COULD HINDER GOALS

Nearly one-third of companies believe nothing will stop them from meeting their sustainability goals, but for the other two-thirds, most of their challenges stem from within. Almost half said they lack internal expertise to meet the innovation challenge, while more than 40% lack management, leadership and budget. However, technical solutions appear to be more available now than they were in 2019, and goals have become clearer and more attainable.

In your opinion, what might prevent your company from meeting sustainability goals or intentions?



MORE THAN 6 IN 10 COMPANIES PRODUCING HOME CARE AND FOOD AND BEVERAGE PRODUCTS ARE CONCERNED ABOUT MEETING GOALS

Home care and food and beverage companies indicated more challenges than respondents from personal and pet care companies. More than half of home care respondents said their company lacks internal expertise, while nearly half are lacking management, leadership and budget. Similarly, almost half of food and beverage companies said they lack the internal expertise to meet the innovation challenge that sustainable packaging requires. Despite these challenges, companies for the most part indicated that their sustainable packaging goals were clear and achievable.

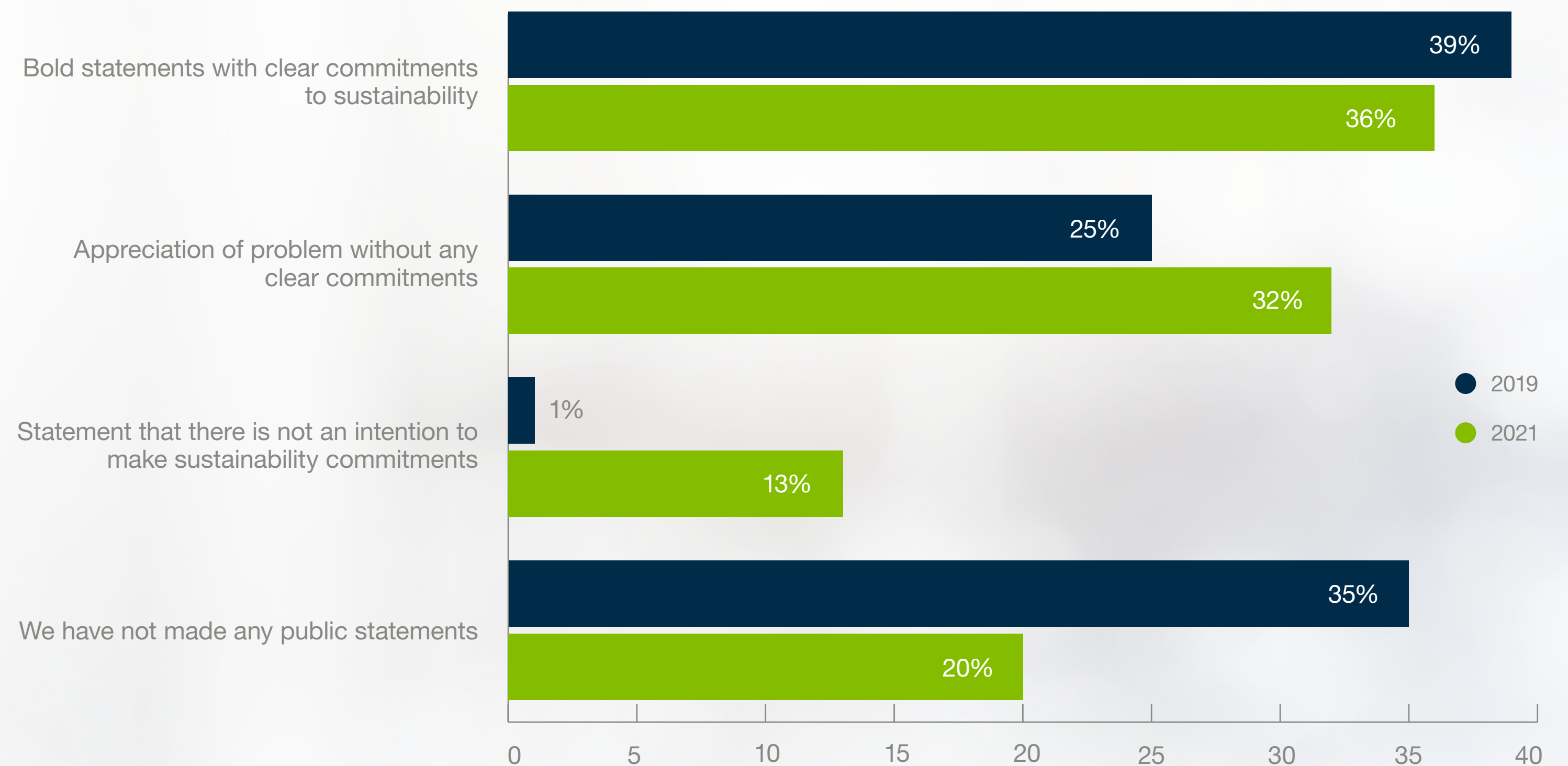
In your opinion, what might prevent your company from meeting sustainability goals or intentions? By industry



TWO-THIRDS HAVE MADE PUBLIC STATEMENTS ABOUT SUSTAINABILITY

As climate change, weather catastrophes and consumer demands for environmental action have dominated headlines, it makes sense that most companies have made some sort of statement about their sustainability commitments. However, just 68% of respondents said their company had made a public statement about their sustainable packaging intentions. Roughly half of those public statements contained clear commitments to sustainability.

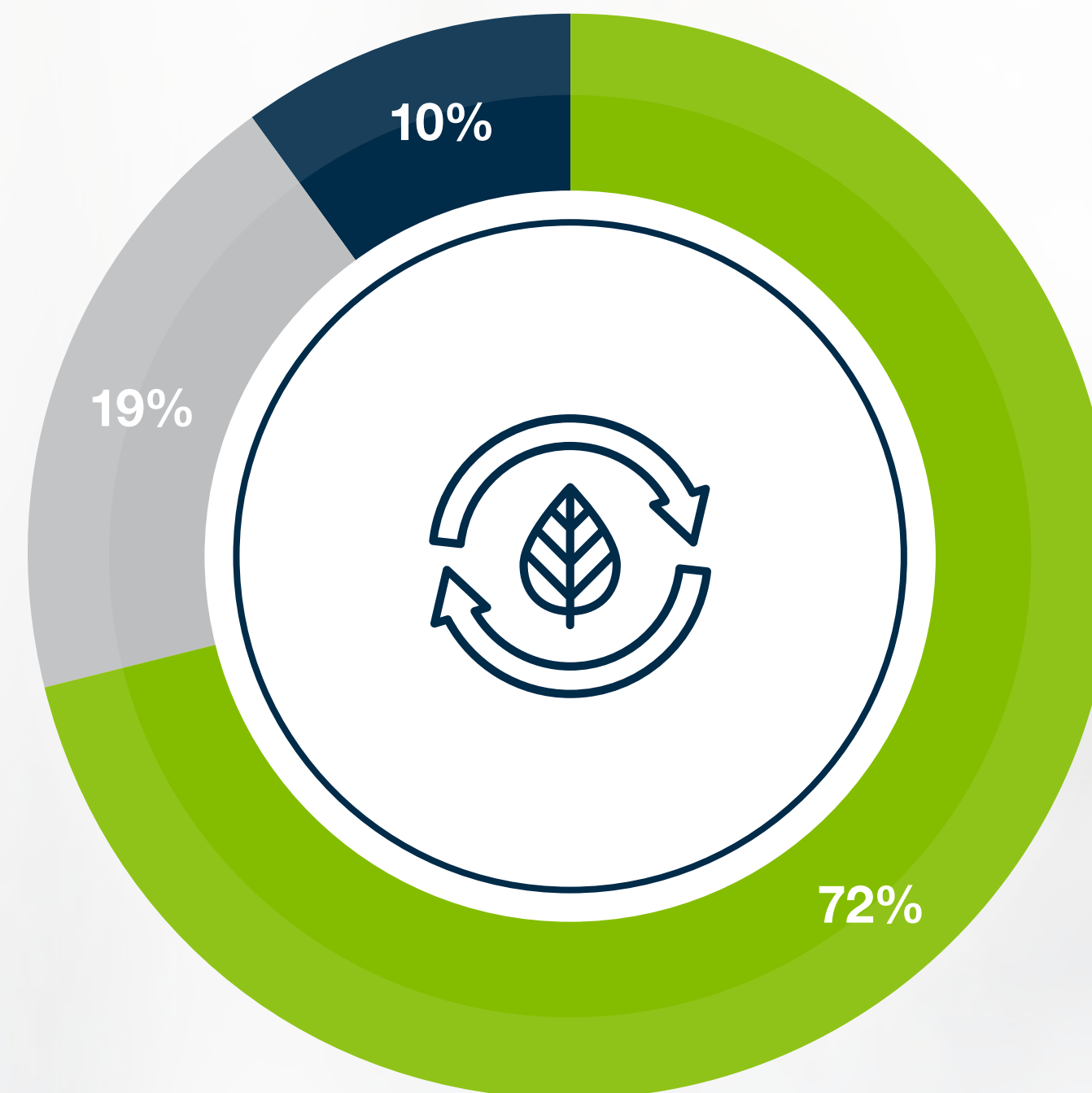
What type of public statements has your company made about intentions for sustainable packaging?



PACKAGING TEAMS ARE EXCITED BY SUSTAINABLE PACKAGING COMMITMENTS

Nearly three-quarters of packaging teams are excited by the challenge of creating sustainable solutions. Considering many companies have already begun working on their eco-friendly portfolio, it is just business as usual, so almost a fifth had no reaction. Despite the aggressive timelines and goals many companies are working toward, like making all plastic reusable or recyclable by 2025, only 10% of packaging teams are nervous about the risk of not delivering.

How did your packaging team react to your company's public statements about sustainable packaging?



- Excited by the challenge
- No reaction, sustainability is business as usual
- Nervous about the risk of not delivering



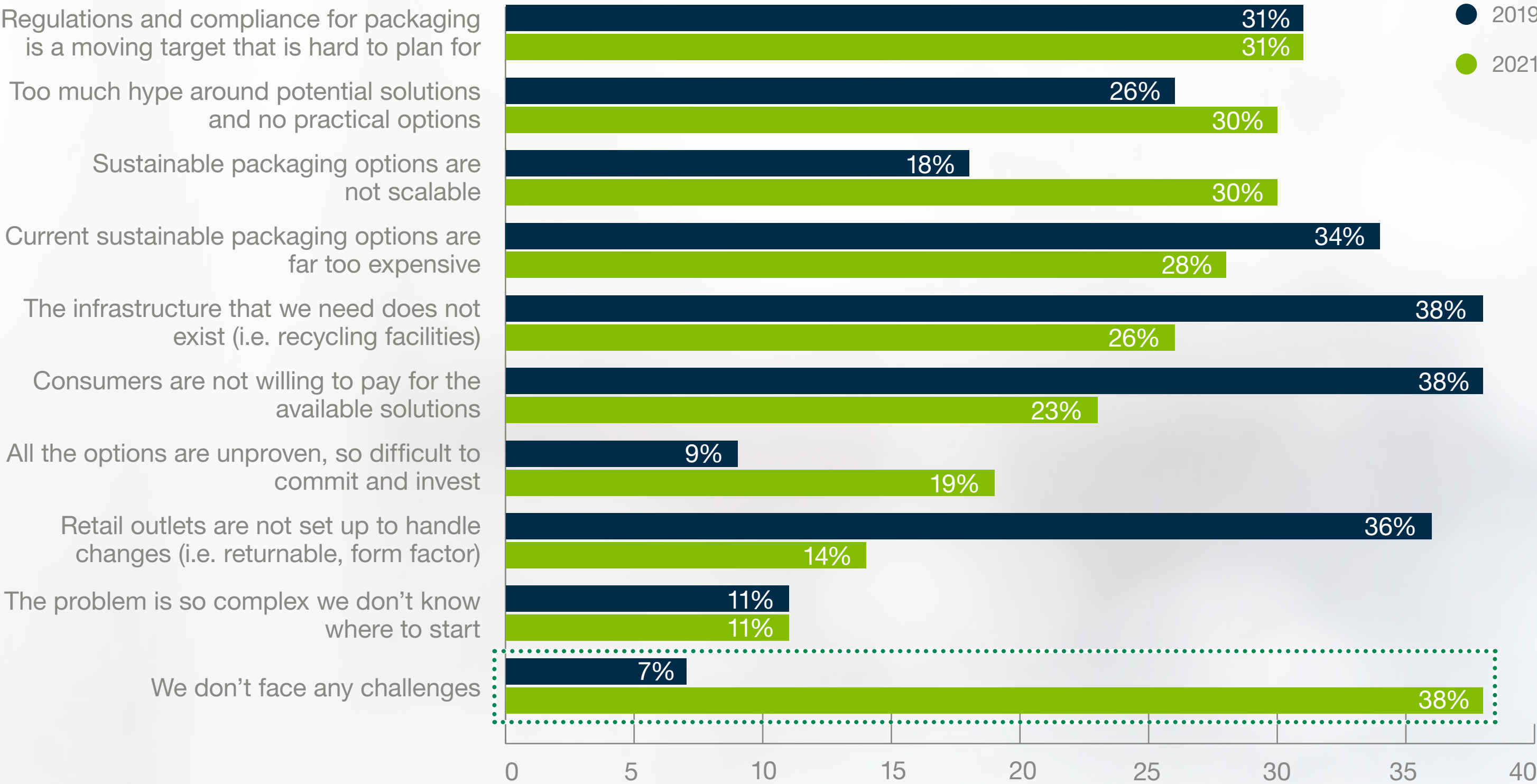
SUSTAINABLE PACKAGING CHALLENGES

MORE THAN 60% FACE CHALLENGES IN DELIVERING SUSTAINABLE PACKAGING

The sustainable packaging question is a substantial one, so it's not surprising that more than 60% of companies face challenges in realizing product-level solutions for sustainable packaging. However, aligning with the rising confidence levels seen earlier in the survey, 38% of respondents said they don't face any challenges, up drastically from 7% in 2019.

Overall, there are fewer concerns about external factors—like recycling infrastructure, retail outlets' ability to handle changes and consumers' willingness to pay more—than in 2019. Companies are still most challenged by changing packaging regulations. Nearly one-third said there are no practical sustainable packaging options, while the same number said current options are not scalable.

What challenges does your company face in delivering sustainable packaging?

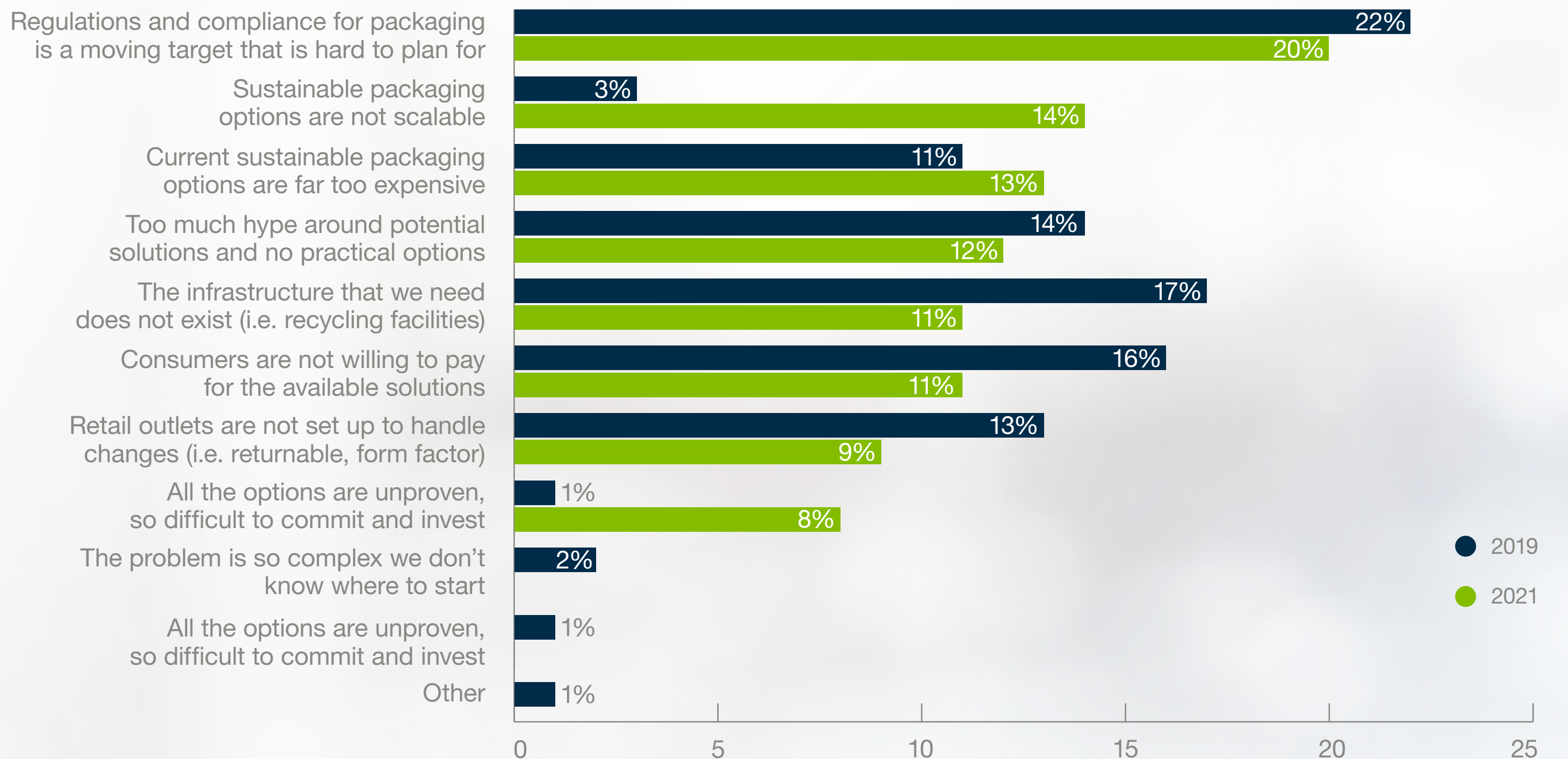


REGULATIONS STILL POSE A CHALLENGE TO DELIVERING SUSTAINABLE PACKAGING

As in 2019, regulations and compliance are the most challenging factors companies must address to deliver sustainable packaging. This remained consistent across the surveyed industries. Compliance is of particular concern to companies that manufacture packaging for foods and beverages, health and hygiene products, and cleaning products, all of which must meet high regulatory bars before reaching store shelves. Additionally, companies are being forced to navigate rapidly changing plastic regulations that vary from country to country and, in the United States, even state to state.

**n=face challenges meeting sustainability goals*

Which of the challenges that your company faces in delivering sustainable packaging is the most difficult to address?



PARTNERSHIPS ARE INCREASINGLY IMPORTANT TO SUSTAINABLE PACKAGING

The number of companies finding outside expertise to meet their sustainable packaging goals has increased significantly from 2019 to 2021, with two-thirds bringing in partners with specialized knowledge and resources. More than half are training their existing staff, and nearly half are investing in in-house innovation centers. However, 53% said they are not making any organizational changes to address their sustainable packaging needs.

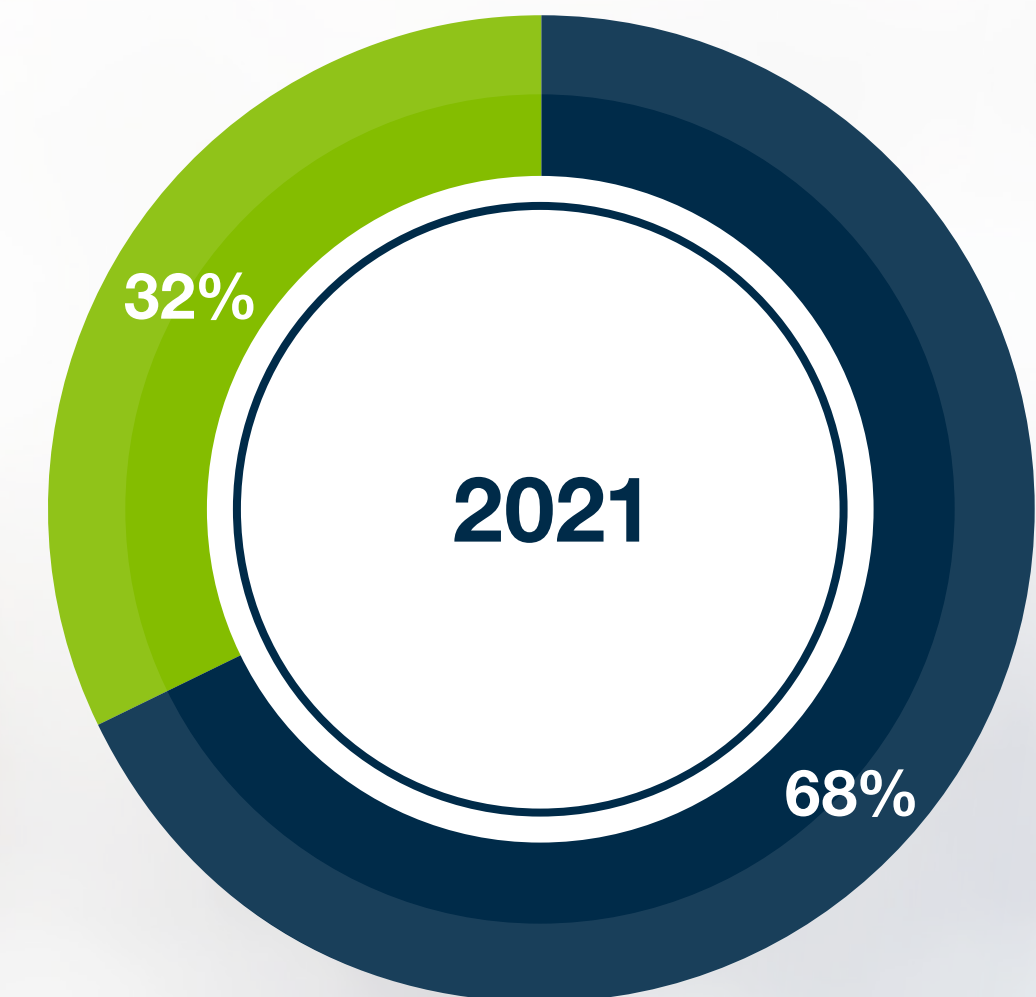
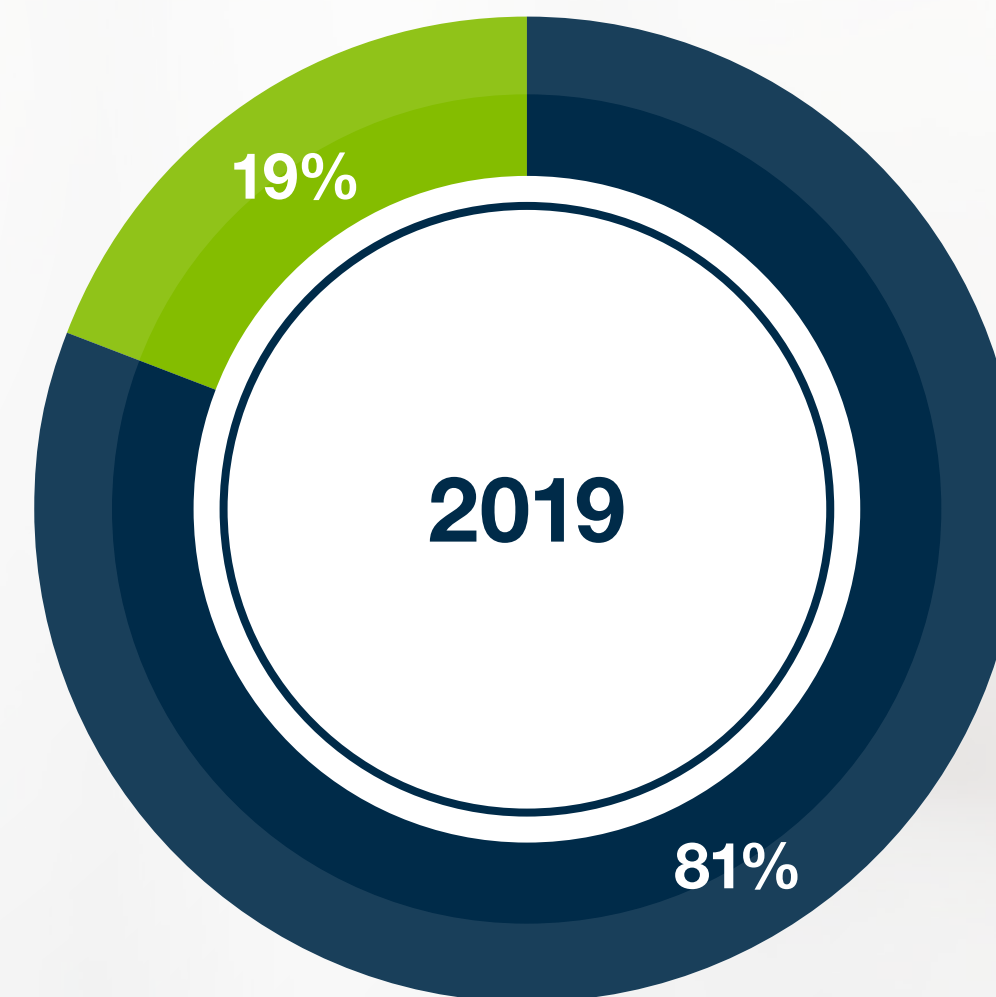
What organizational changes are your company making to address sustainable packaging needs? Choose all that apply.



COMPANIES MORE WILLING TO GIVE A LITTLE ON PRODUCT PROTECTION FOR SUSTAINABILITY

As the amount of packaging is reduced for sustainability purposes, especially plastic packaging, there becomes less of a barrier between the product and the outside world. Additionally, new materials with less barrier protection and shorter shelf lives than metal, glass or virgin plastics—like compostable materials—are becoming more of a viable option for product packaging. In previous years, reducing the packaging’s barrier or the product’s shelf life has been a no-go for brands. In 2021, however, nearly a third of companies said they would consider a slightly lower level of product protection in their packaging to gain sustainability advantages, up from one-fifth in 2019. Combining product durability with recyclability and a responsible end-of-life plan for packaging is one of the trickiest balancing acts challenges brands are trying to achieve.

Which of the following statements best represents your company’s approach to sustainable packaging?



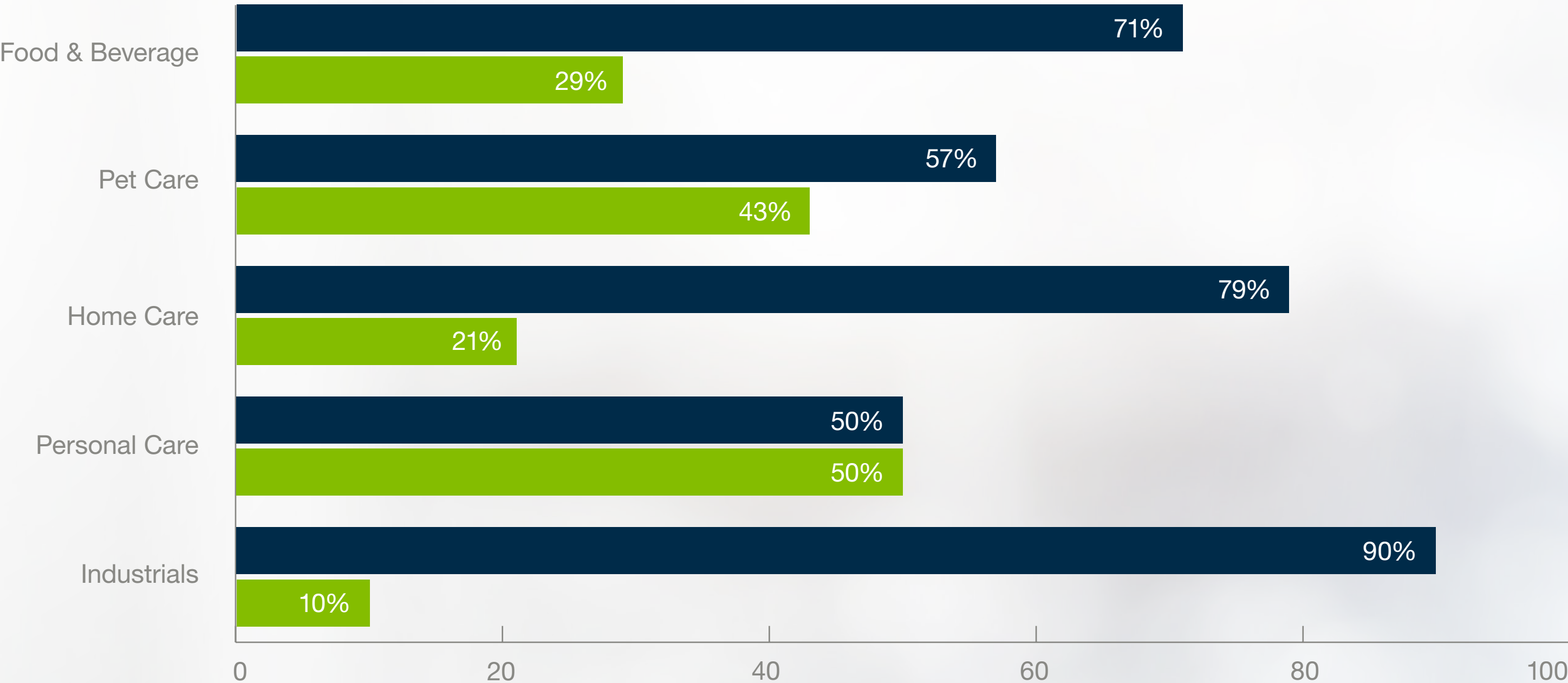
● Any sustainable packaging option must include equal or greater product protection as non-sustainable options

● We would consider a slightly lower level of product protection in order to gain sustainability advantages

PRODUCT PROTECTION IS STILL PARAMOUNT FOR SOME INDUSTRIES

Due to regulations, the type of products being packaged and the fear of customer dissatisfaction, some industries cannot or will not consider less protection in their packaging. An overwhelming 90% of industrial brands—which deal with hazardous chemicals that must be impeccably contained—said any sustainable packaging option must have equal or great product protection as non-sustainable options, while 71% of food and beverage and 79% of home care brands said the same.

Which of the following statements best represents your company's approach to sustainable packaging?



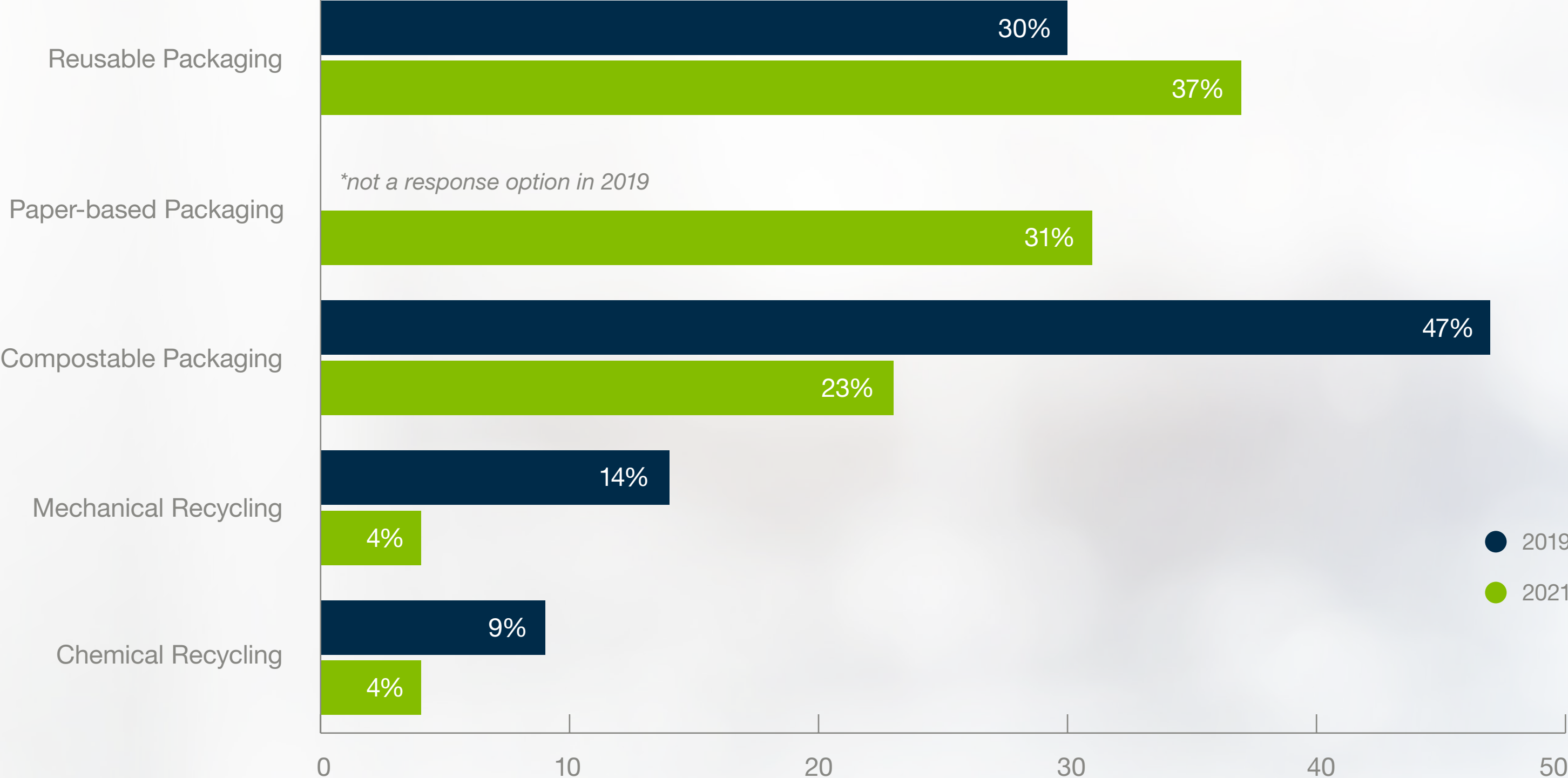
● Any sustainable packaging option must include equal or greater product protection as non-sustainable options

● We would consider a slightly lower level of product protection in order to gain sustainability advantages

PACKAGING DESIGNED FOR CIRCULARITY IS INCREASINGLY POPULAR

This year's respondents rated reusable packaging as the most favorable solution to sustainable packaging, showing a growth in popularity since 2019. In that time, more consumer packaged goods brands have adopted reusable packaging systems or joined existing ones like Loop, which allows customers to refill durable containers with food and beverage, personal care, beauty and household cleaning products. Packaging materials that can be recycled infinitely like paper (31%) or returned to the earth, like compostable packaging (23%), were also rated highly. Both of these options are simple for the consumer to dispose of in their own home, making them convenient and hassle-free.

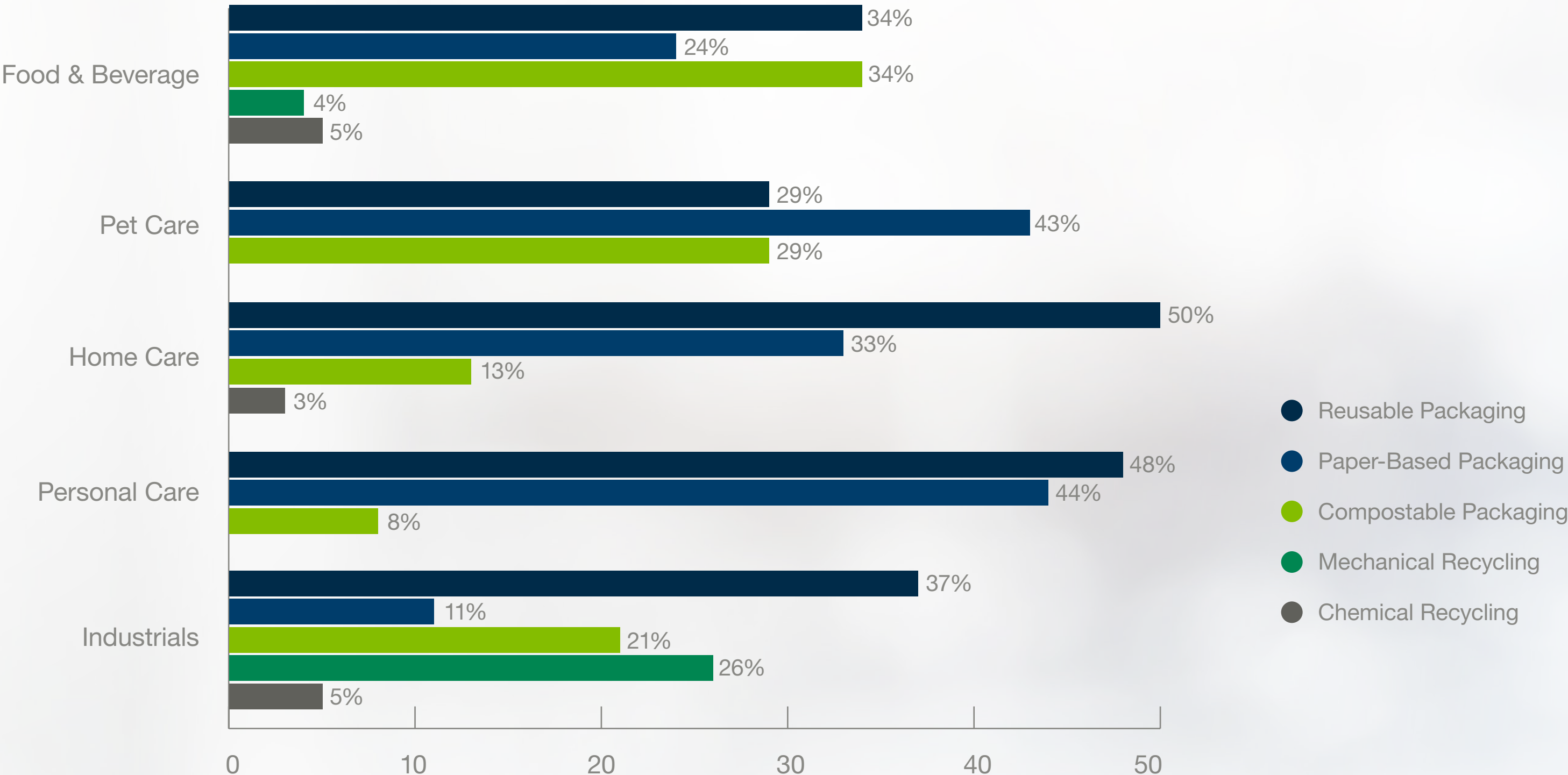
In your opinion, what will be the ultimate solution to sustainable packaging?



REUSABLE PACKAGING IS PROMISING FOR CPGs

Respondents from food and beverage, home care and personal care brands chose reusable packaging as the ultimate solution to sustainable packaging, potentially creating opportunities for new refill processes or connected packaging. Paper-based packaging was ranked second by personal and home care brands. Food and beverage brands again showed preference for compostable packaging, which tied for first with reusable packaging as the industry's top sustainable solution.

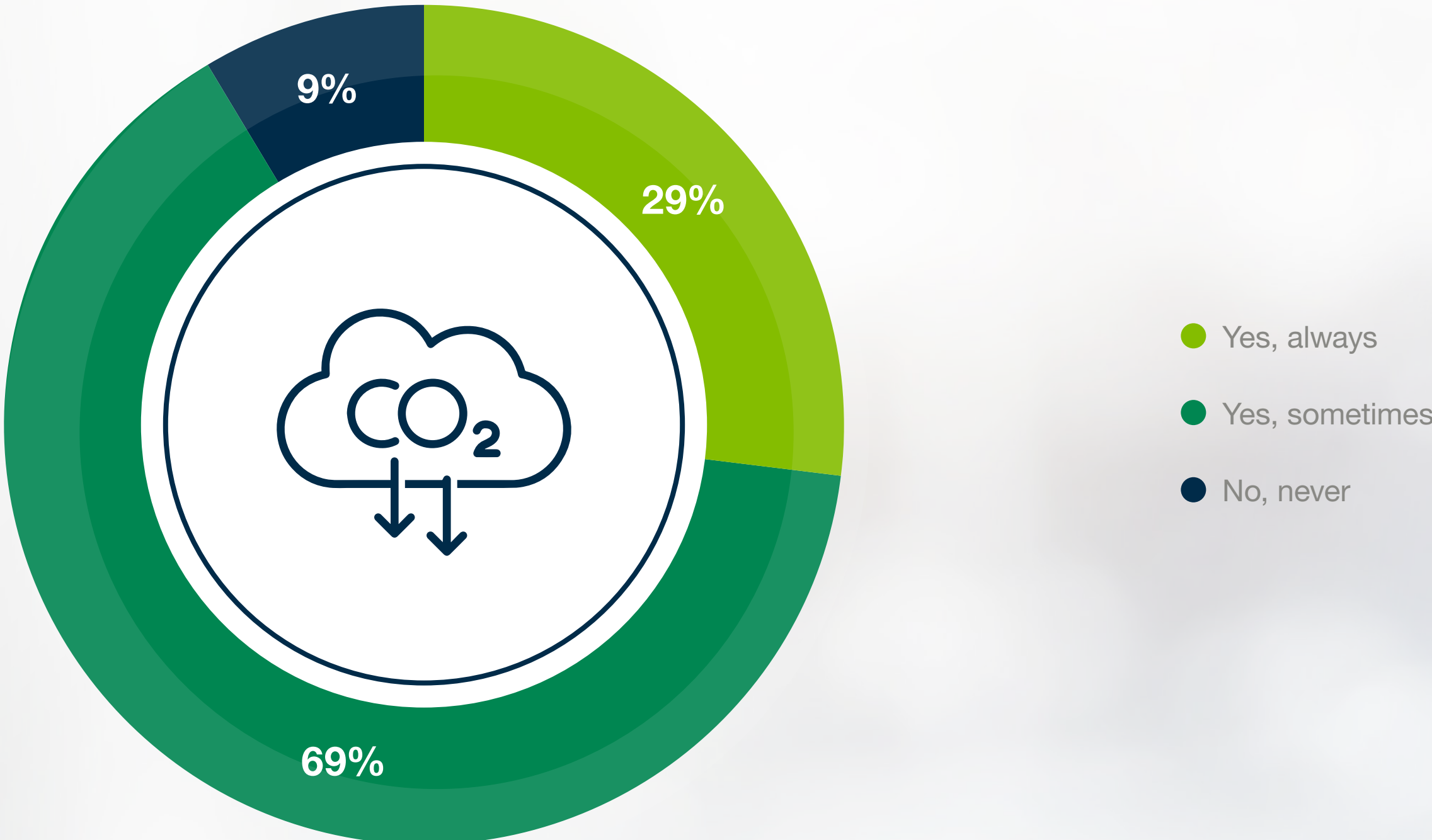
In your opinion, what will be the ultimate solution to sustainable packaging? By industry



LESS THAN A THIRD ALWAYS EVALUATE THE CARBON IMPACT OF PACKAGING OPTIONS

Manufacturing is the third-largest contributor to greenhouse gas (GHG) emissions in the United States, with carbon dioxide released throughout the production of raw materials and finished goods as well as the transportation process. Yet less than 30% of companies always calculate the carbon impact of packaging options. Going forward, this will be a critical step to determining which types of packaging are truly the most sustainable.

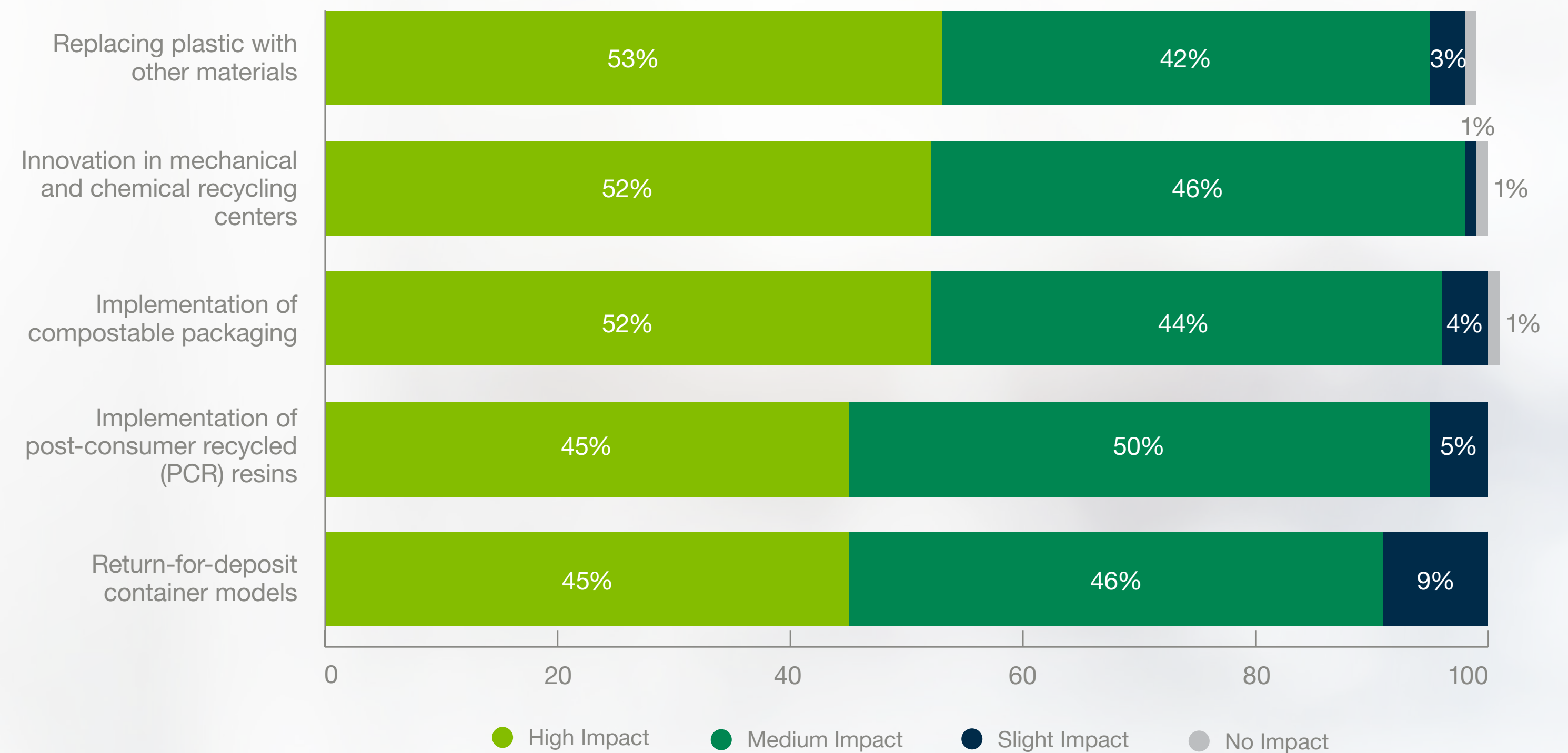
Does your company calculate the carbon impact of products when evaluating packaging options?



WHICH WILL HAVE THE BIGGEST IMPACT ON THE ENVIRONMENT

Aligned with previous responses, survey respondents said replacing plastic with other materials would have the highest impact on the environment, followed by compostable packaging and innovation in recycling centers. Notably, respondents' answers indicate their belief that any of these actions would make a positive impact on the environment.

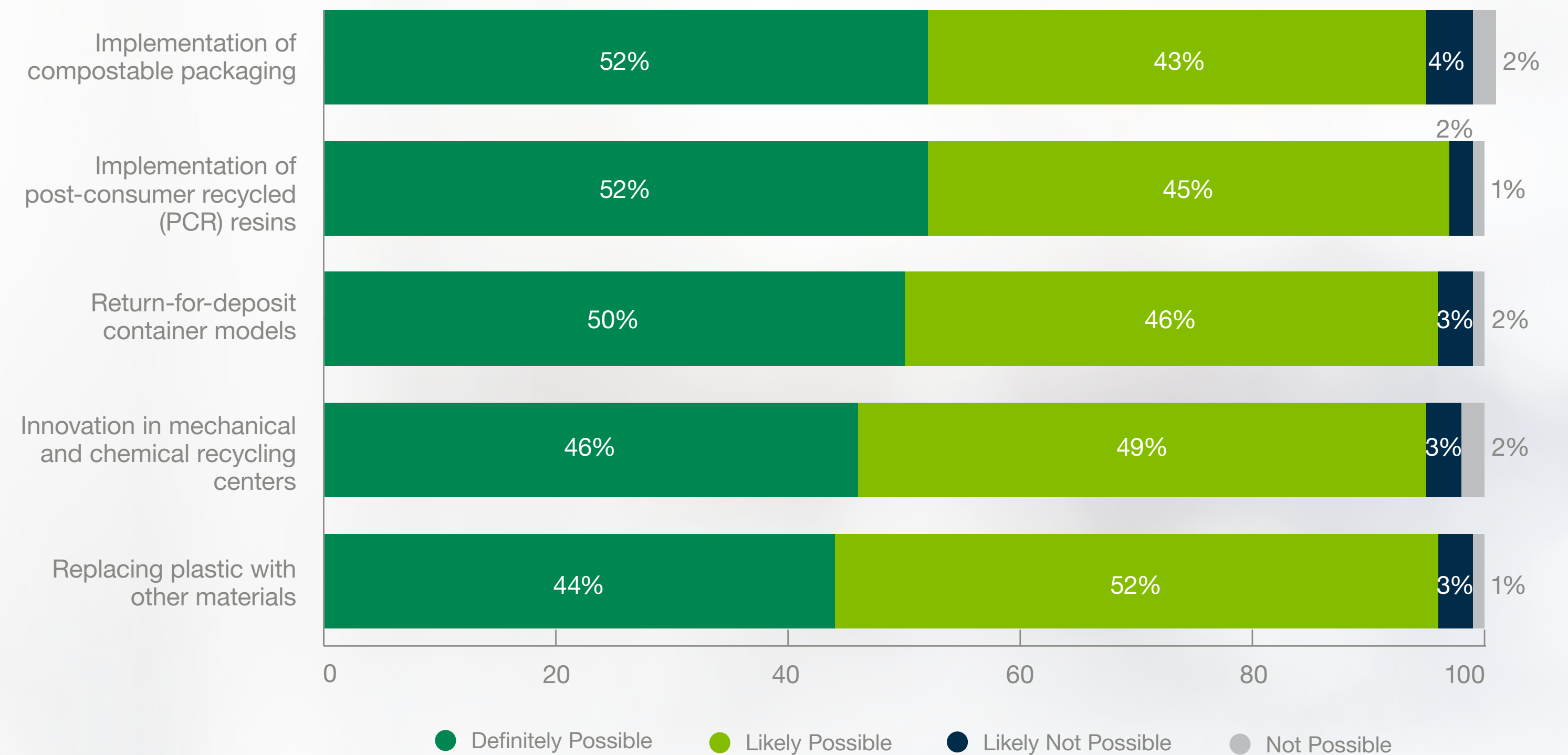
Rate each of the following approaches to sustainable packaging based on its potential to have a positive impact on the environment.



COMPOSTABLE PACKAGING AND PCR RESINS CAN BE IMPLEMENTED EFFECTIVELY

Respondents were most confident that their company could implement compostable packaging and post-consumer recycled (PCR) resins effectively, with more than half saying it was “definitely possible.” Though respondents said replacing plastic with other materials had the highest potential to have a positive impact on the environment, plastic’s ubiquity and usefulness could make it challenging to replace. Thus, 52% said replacing plastic was “likely possible.”

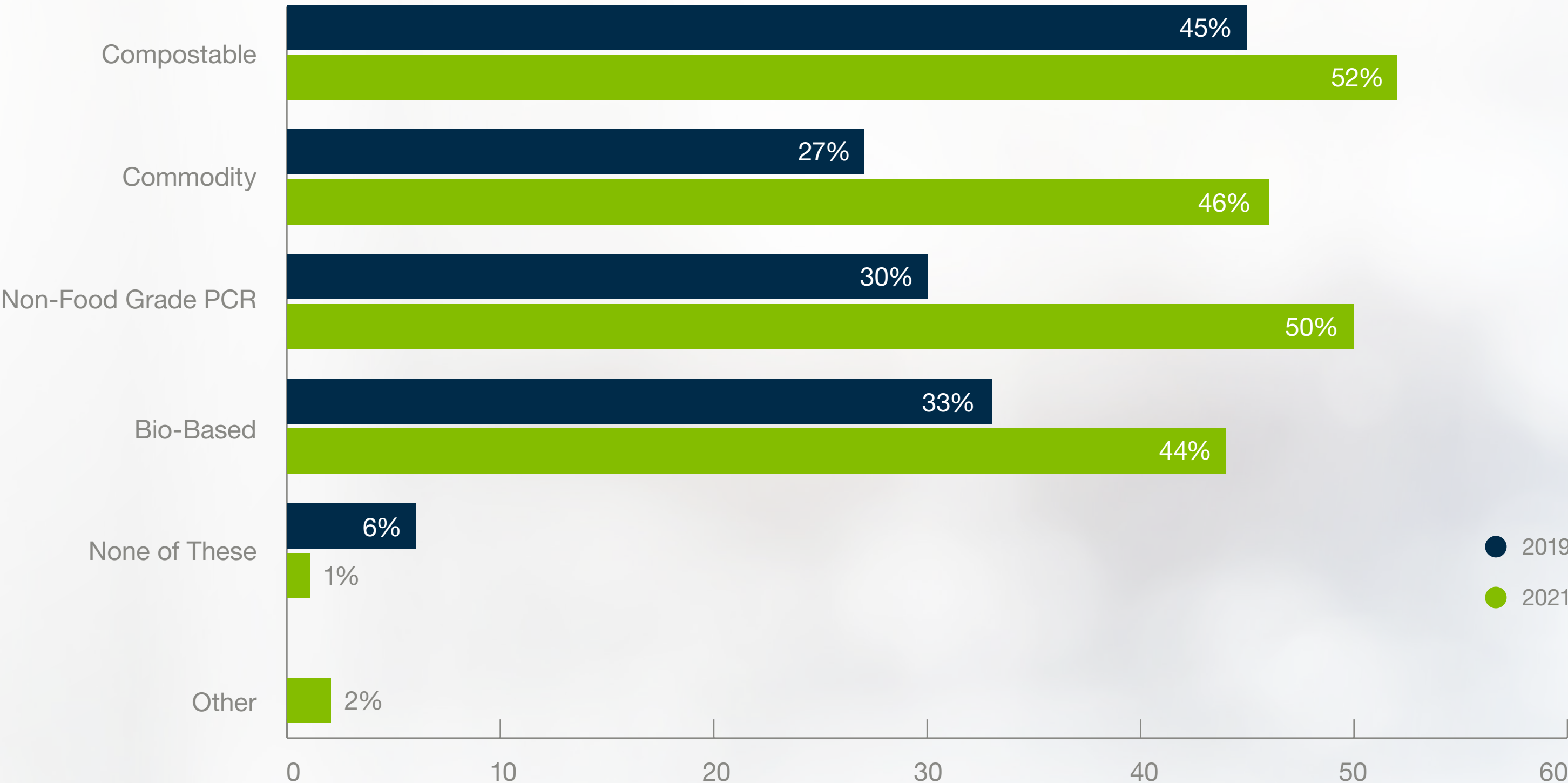
Rate each of the following approaches to sustainable packaging based on its potential for your company to implement effectively.



COMPOSTABLE RESINS ARE MOST COMMONLY USED

The use of compostable resins has increased 7% between 2019 and 2021, aligning with brands' growing interest in compostable packaging. These resins must meet specific requirements and break down within a set timeframe, unlike the more vague bio- or plant-based resins. Non-food grade PCR resins jumped drastically, from 30% in 2019 to 50% in 2021. This could be attributed to the increased adoption of recycled plastics in personal and home care packaging.

Which of the following resin types are playing a significant role in your sustainable packaging strategy?



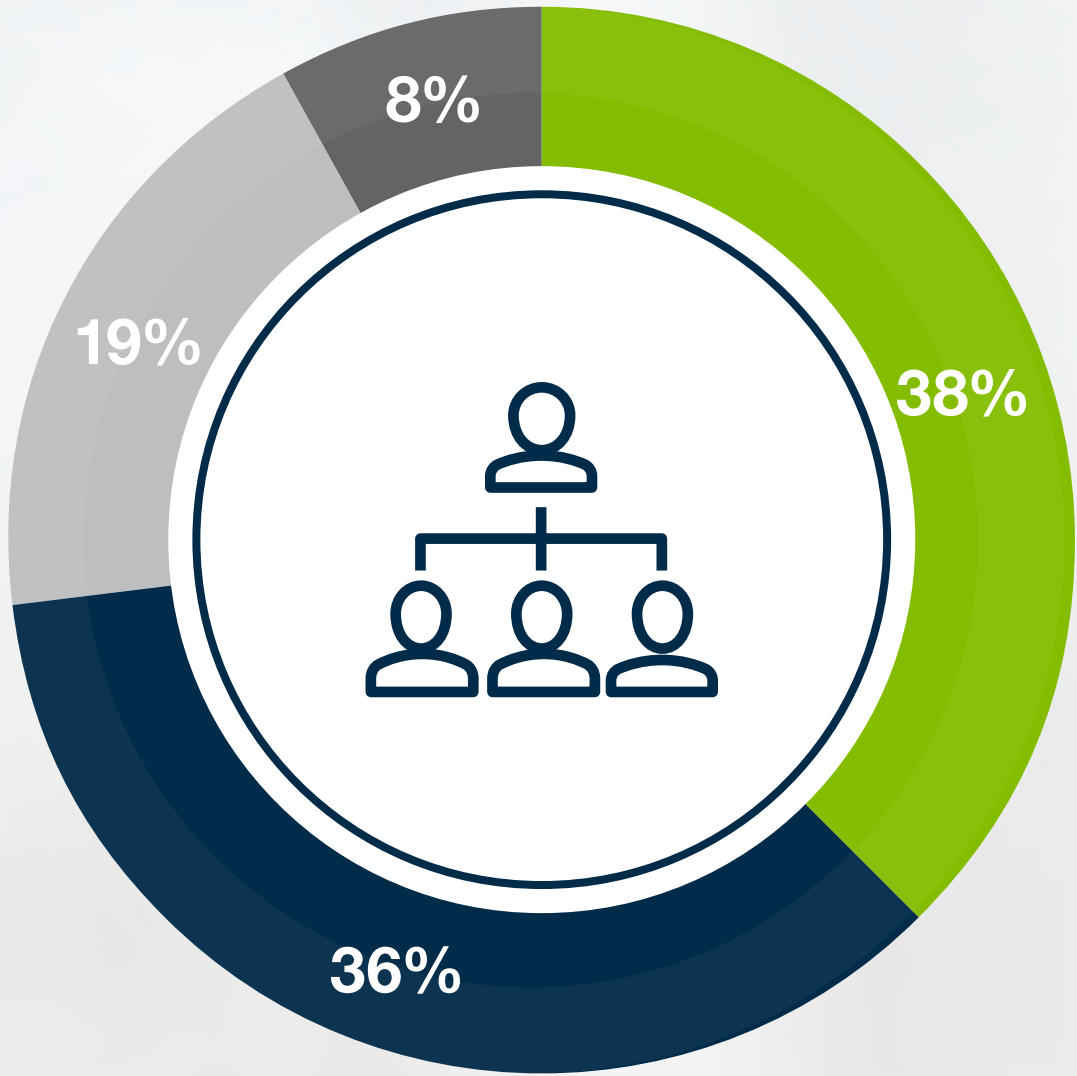
SURVEY METHOD AND PARTICIPANTS

An online survey was fielded to decision-makers responsible for packaging at consumer packaged goods and packaging companies. A range of questions were asking about progress and goals, as well as specific approaches to achieve sustainable packaging. A total of 186 qualified individuals completed the survey.



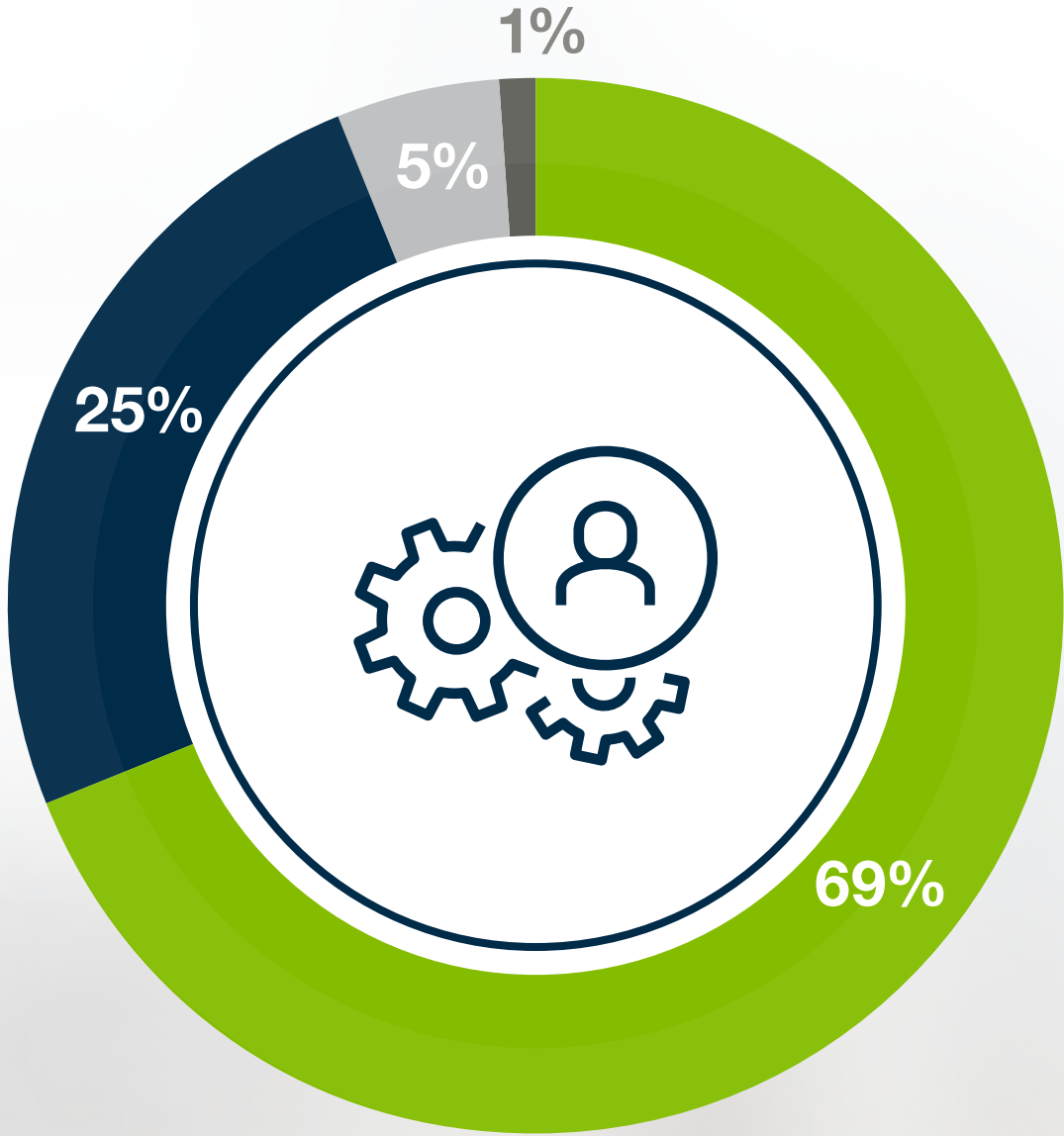
INDIVIDUALS REPRESENTED

Job Level



- Director
- Senior Manager
- Vice President
- C-Suite

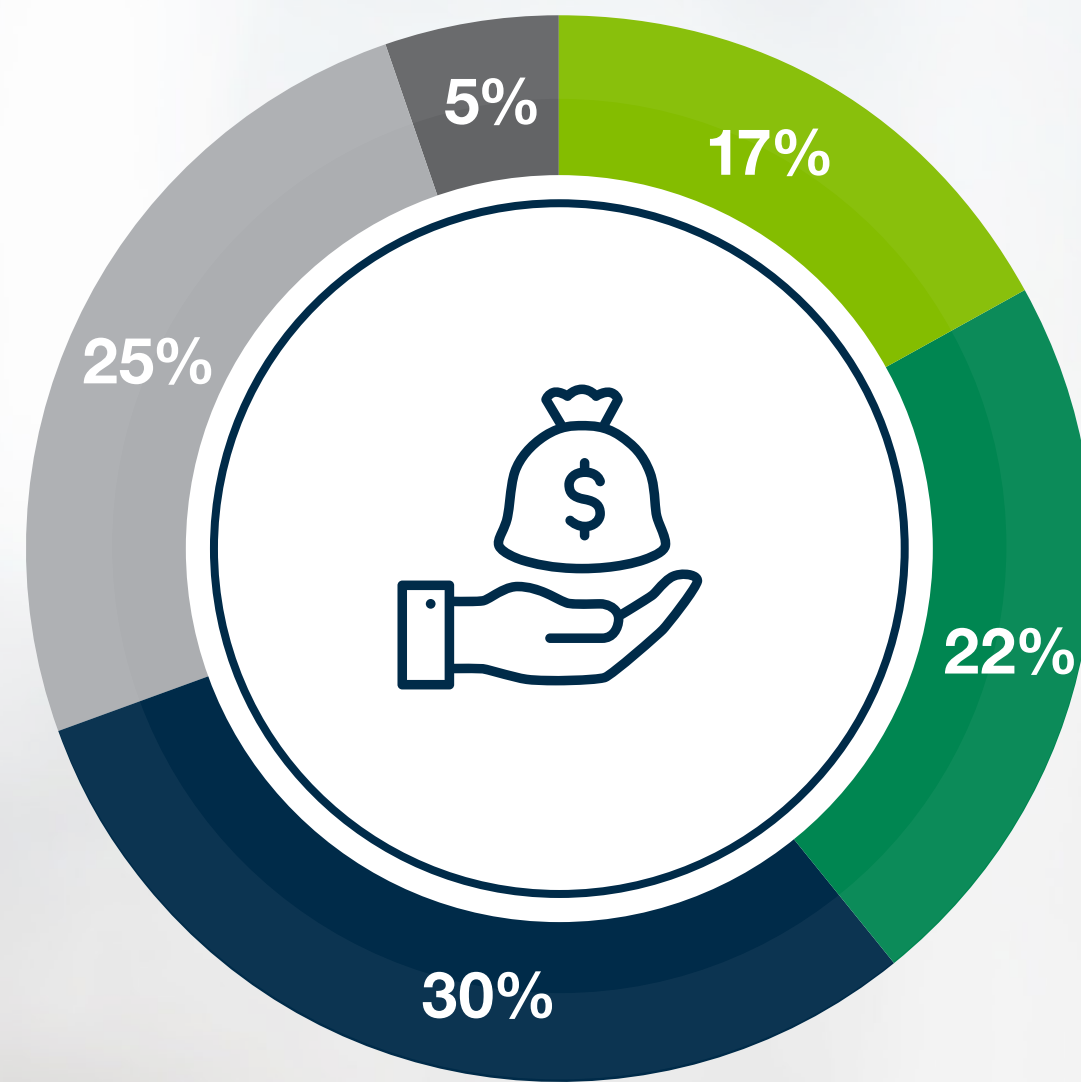
How many years have you been in the consumer packaged goods or packaging industry?



- 11+ Years
- 6-10 Years
- 3-5 Years
- Less than 2 Years

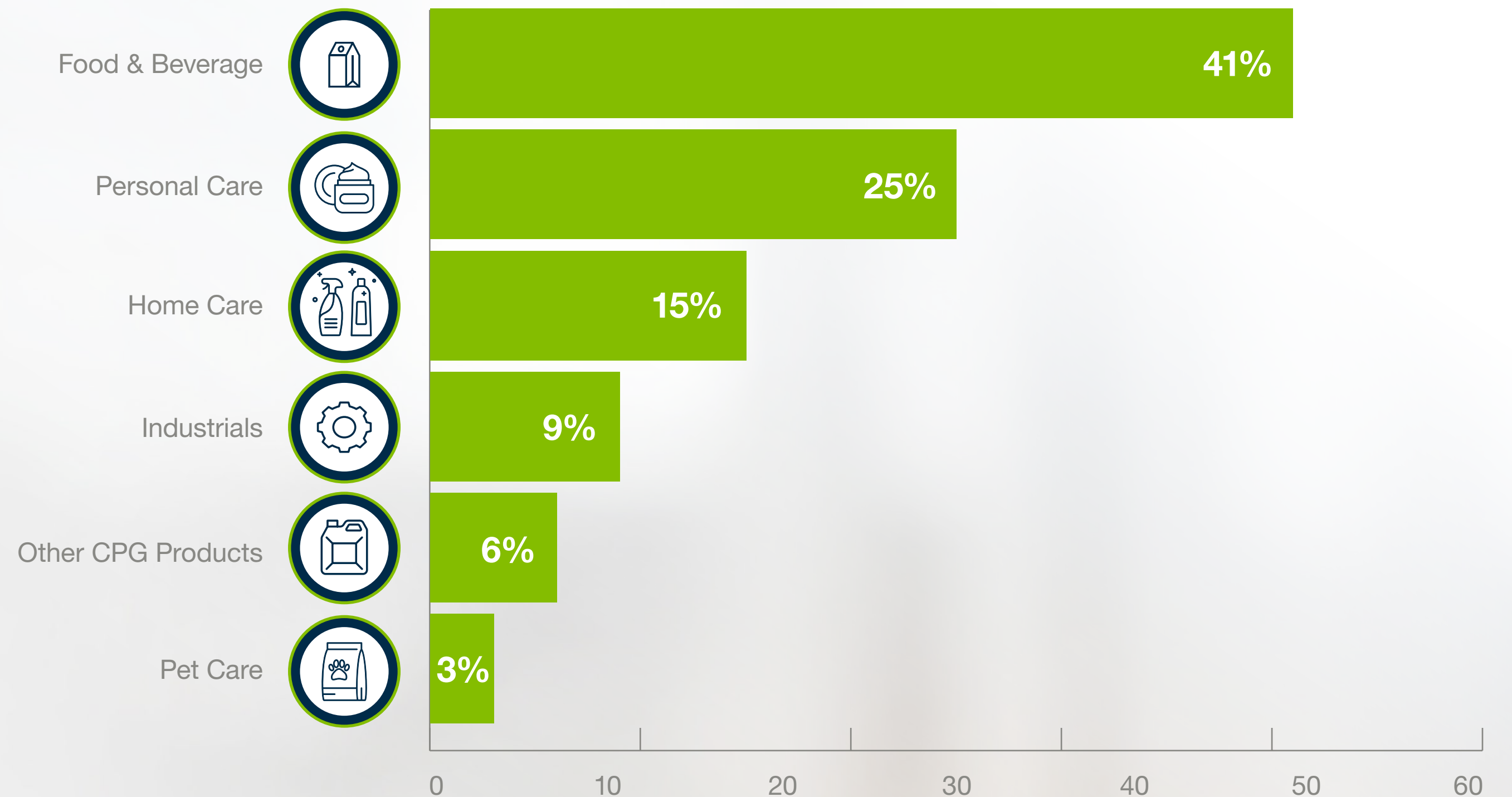
COMPANIES REPRESENTED

Company Size
(Annual Revenue)



● Less than \$50M
 ● \$200M-\$1B
 ● More than \$20B
● \$50M-\$200M
 ● \$1B-\$20B

Does your company manufacture any of the following types of goods?



JABIL PACKAGING SOLUTIONS

Consumers will change the way they shop more in the next 10 years than they have over the last four decades—and the world of packaging is being altered forever. Online shopping has created more choices, less brand loyalty and fragmented marketing. Sellers don't control the buyer's journey any more. Buyers are calling the shots. And the pandemic has accelerated some of the most transformational trends.

At the same time, companies producing consumer packaged goods (CPG) are at a turning point—find smart ways to make their products and packaging sustainable, or potentially face increasing regulations, taxes and consumer backlash.

Jabil Packaging Solutions (JPS) has the resources and experience to deliver innovative, sustainable packaging for virtually any consumer product—from food and beverage to home and personal care. JPS leverages three unique solutions suites to incorporate packaging, electronics and digital capabilities into intelligent ecosystems that connect brands and retailers with evolving consumer needs.



FUSEPACK FROM JABIL PACKAGING SOLUTIONS

FusePack breaks the boundaries of traditional packaging. This innovative new technology platform pairs a rigid injection molded frame and a flexible in-mold label sidewall. By leveraging the best elements of rigid and flexible packaging, Jabil has created a lightweight yet strong package that reduces carbon footprint and minimizes plastic content while improving e-commerce performance.

FusePack's lightweight yet strong packaging can withstand the shocks, vibrations and bumps associated with e-commerce delivery. Where other packages may crack or deform, spoiling product or diminishing the unboxing experience, FusePack walls and lidding simply flex and diaphragm to accommodate impact forces, pressure changes and temperature fluctuations. A rigid frame, and the option for non-round shapes, maximizes shelf density and ensures the product always faces the customer correctly.

FusePack's hybrid structure allows for limitless combinations of materials, sizes, shapes and closure styles. Want a hyper stylized, mono-material PP, recyclable FusePack format that reduces plastics usage by 70%? FusePack can do that. How about a 100% plastic-free format with paper side walls and an inner rigid frame made of regrind able bio-materials? FusePack can do that too.



ECOLOGIC FROM JABIL PACKAGING SOLUTIONS

Ecologic is a hybrid paper packaging technology that leverages a strong fiber outer shell and a thin inner plastic liner, resulting in containers that are up to 70% less plastic when compared to legacy formats of the same size. The fiber outer shell, made of recycled cardboard and newspaper, provides structural stability and protection of the product inside. The inner liner, made of 80% recycled HDPE, keeps the product sanitary and clean. Together, the two pieces remain 100% recyclable and help reduce consumer reliance on single-use plastics.

Ecologic's hybrid paper bottles are designed with an innovative two-shell system with interlocking paper tabs (no glue). This drives significant plastic reduction, carbon footprint improvements, and minimizes waste in production. Our Box to Bottler system offers unmatched visibility and control into product lifecycles. Ecologic works with brands and retailers to capture their own recycled waste then repurposes it into fresh packaging that can be re-used countless times.



FOR MORE INFORMATION

SIS International Research

SIS International Research is a full-service global Strategy Consulting and Market Research firm with over 35 years of industry experience. Headquartered in New York City and with on-the-ground offices worldwide, SIS is uniquely positioned to offer clients in-depth insight and recommendations into the global marketplace. We deliver the around-the-clock project management and client servicing that is essential in a 24/7 global economy.

For more information, visit
sisinternational.com

Jabil

Jabil (NYSE: JBL) is a manufacturing solutions provider with over 260,000 employees across 100 locations in 30 countries. The world's leading brands rely on Jabil's unmatched breadth and depth of end-market experience, technical and design capabilities, manufacturing know-how, supply chain insights and global product management expertise. Driven by a common purpose, Jabil and its people are committed to making a positive impact on their local community and the environment.

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