

A photograph of a person's hands holding a clear plastic bottle, about to drop it into a white recycling bin. The bin has a large blue recycling symbol on its front. The background is slightly blurred, showing an indoor setting with a window and some furniture.

2018 SUSTAINABLE PACKAGING STUDY

Comprehensive results of the
2018 Sustainable Packaging Study
conducted by *Packaging Digest* in partnership
with the Sustainable Packaging Coalition.

PACKAGING[®]
DIGEST



**SUSTAINABLE PACKAGING
COALITION[®]**

CONTENTS

3	Introduction
4	Key Insights
6	Part 1: Plastic Packaging Attitudes & Challenges
6	Current Climate
13	Bio-based Plastics
16	Recycling
21	Bans / Regulations
26	Part 2: Actions Companies Are Taking
31	Part 3: SPC Member Differences
37	Part 4: Recommendations
38	Part 5: Methodology & Demographics
41	Part 6: List of Charts

Co-author Adam Gendell is Associate Director of the Sustainable Packaging Coalition, where he has worked since 2010. His work focuses on helping SPC members and the broader packaging community identify and understand sustainability considerations and opportunities in packaging.

434-202-4790; adam.gendell@greenblue.org

Co-author Lisa McTigue Pierce is Executive Editor of *Packaging Digest*. Since 1982, Pierce has been a journalist covering packaging news, emerging trends and technological innovations for consumer packaged goods and healthcare products.

630-481-1422; lisa.pierce@ubm.com

INTRODUCTION

Packaging Digest has been partnering with the Sustainable Packaging Coalition since 2007 on this benchmarking study into sustainability and packaging.

Each year, we ask questions about various aspects of general packaging sustainability. Some questions are the same every year to give us a historical picture of where the industry is—and where it is shifting.

But each year we also add new questions around the hot topics *du jour*. This year, we focused on plastic packaging sustainability because it has captured so much attention around the world from consumers, organizations and governments today.

In this detailed report, we'll first provide some context by talking about the current climate of plastic packaging. Then we'll share the attitudes and challenges of our survey respondents, specifically in three areas:

1. Bio-based Plastics;
2. Recycling; and
3. Bans & Regulations.

After that, we'll tell you what actions companies are taking or considering taking in response to the backlash against plastic packaging. We'll explain how SPC members are thinking differently and why. And we'll share some ideas that might help you make informed decisions about how to weather the plastic packaging storm we're experiencing today.

We'll show some results from the General Sustainability Trends section that relate to or further define this year's focus on plastic packaging.

We presented highlights of the results of the plastic packaging questions in the webinar "Will Plastic Packaging Continue to Thrive in Today's Climate of Environmental Concerns?" on Oct. 30, 2018, which you can [view on-demand by clicking here](#).

KEY INSIGHTS

Plastic Packaging Attitudes & Challenges

- When it comes to plastics, packaging professionals are hyper aware there is an attitude or perception problem...69% of respondents feel a high level of environmental concern around plastic packaging. Much of that concern is centered around the visible and visceral problem of pollution in our oceans and waterways.
- And the distress will probably get worse before it gets better. Although 70% believe environmental concerns for single-use plastic packaging are at an all-time high, nearly everyone taking the survey (93%) believes environmental concerns regarding plastic packaging will continue to grow.
- More than three-quarters (78%) of packaging professionals taking our survey say increasing recycling rates is the most effective way to help alleviate these concerns, especially when it comes to pollution in our oceans, seas and streams. For that, 87% say recycling is a viable way to prevent plastic packaging from ending up in marine environments.
- But 55% describe the current state of plastic packaging recycling in the U.S. as “struggling,” with another 9% saying it’s “near death.” How can recycling be plastics’ savior if it is besieged itself?
- If recycling isn’t the end-all be-all, what about bio-plastics? Can they help? The perception is better than the reality. Although 74% say bio-based plastics improves the environmental *perception* of plastics packaging, only 42% think it improves the *reality*. However, packaging professionals are looking seriously at bio-plastics, as more technologies are commercialized; as more suppliers mean additional sourcing options; and as costs come down and performance goes up.
- But if bio-plastics aren’t the best solution, should we stop using plastic packaging altogether? Almost half (47%) believe outright banning or regulating single-use plastic packaging is the answer. Will wishing make it so? Maybe—59% *definitely* expect to see additional bans on plastic packaging and another 37% think we *might* see more bans in the future. That’s 96% who will not be surprised by government intervention in the future.
- But companies are willing to take voluntary action. In fact, 64% of respondents say they are already reducing package weight and/or increasing

material efficiency. But the effort they are considering the most is to boost their use of bio-plastics, with nearly half (47%) of respondents saying this.

- Members of the Sustainable Packaging Coalition, who are often better informed on eco issues, think the current situation is even scarier than non-members do. But they're not moving away from plastics and they don't think that's the answer. They believe in the potential of the industry initiatives and they're making the changes they believe are needed.
- No single action—be it recycling, using bio-plastics or supporting bans—will solve the complex situation plastic packaging is in today. It will more likely be a multi-pronged approach. To that end, many programs to address concerns about plastics are already underway that packaging professionals can learn more about and participate in. These include a variety of corporate goals, as well as [The New Plastics Economy](#), the [How2Recycle Label](#) and [Circulate Capital](#).

1. PLASTIC PACKAGING ATTITUDES + CHALLENGES



CURRENT CLIMATE

Plastic pollution in the ocean is the centerpiece of what is happening now with plastic packaging in the environmental world.

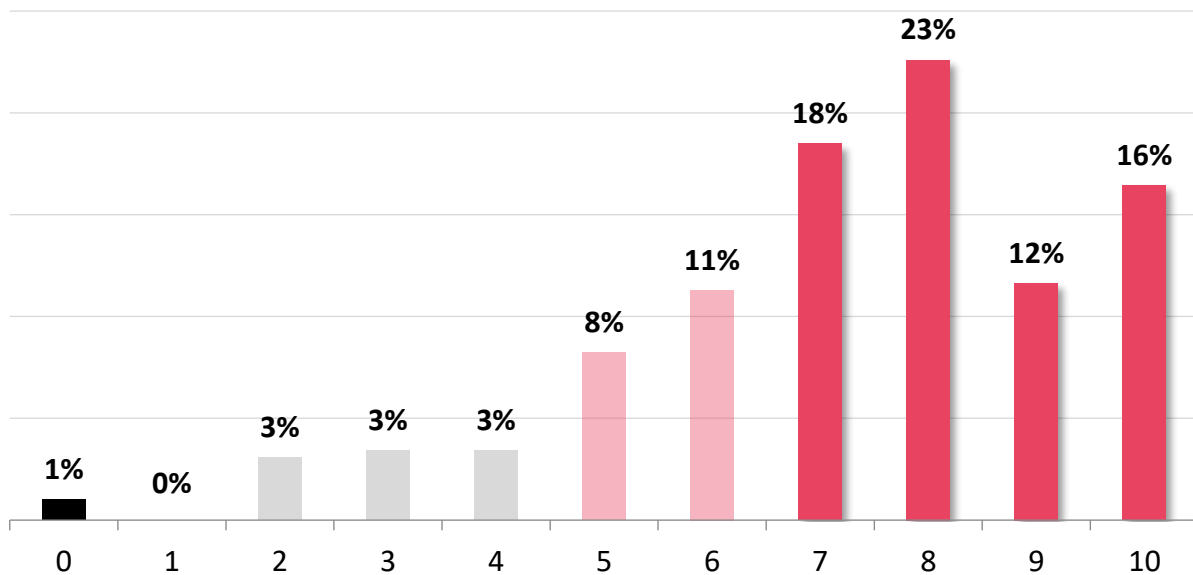
To be fair, plastic packaging offers plenty of benefits. But it also presents a suite of challenges. If you think about it, most environmental challenges around plastic packaging are largely invisible. No one tends to see the consumption of fossil resources or emissions of greenhouse gases. But marine debris is a visible and visceral issue.

Whether it's [National Geographic's Plastic or Planet campaign](#) or the [YouTube video](#) of a turtle with a straw stuck in its nose that went viral, plastic packaging in the ocean is something everyone can comprehend and relate to.

With all of today's activity in this area, it's not surprising the majority of respondents to our study agree the level of concern around plastic packaging sustainability is high. On a scale of 0 to 10, a mere 1% said they have no concern. But as we look at the higher numbers—7, 8, 9 and 10—we see the number of people expressing concern rises sharply. More than two-thirds of survey respondents—69% actually—feel a high level of concern.

1. Rate your opinion on the current climate of environmental concerns around plastic packaging.

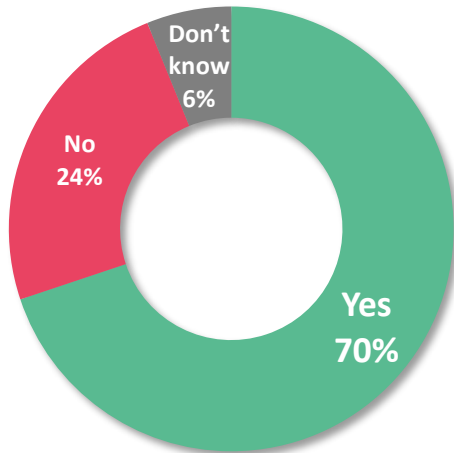
0=no concern; 10=max level of concern



Source: *Packaging Digest* 2018 Sustainable Packaging Study

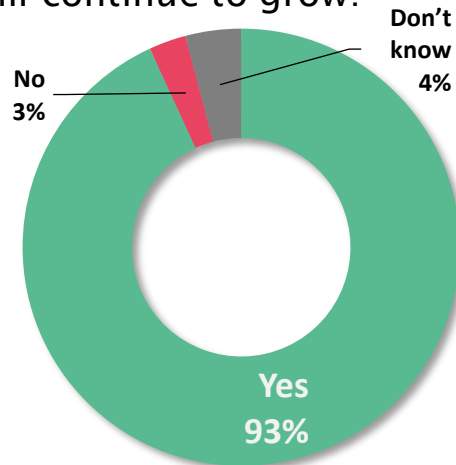
Most respondents told us they think the level of concern around plastic packaging is about 75% or 80% of the theoretical maximum. But we also see 16% of people who took our survey gave it a 10 out of 10, saying environmental concern around plastic packaging is as high as it could possibly be.

2. Do you believe environmental concerns for single-use plastic packaging are at an all-time high?



Source: *Packaging Digest* 2018 Sustainable Packaging Study

3. Do you believe environmental concerns regarding plastic packaging will continue to grow?



Source: *Packaging Digest* 2018 Sustainable Packaging Study

But is this the worst we've ever seen? Only about a quarter say "No," indicating they've seen worse. So that leaves about three-quarters of people taking the survey who say environmental concerns for single-use plastic packaging *are* at an all-time high, or they don't know if they are.

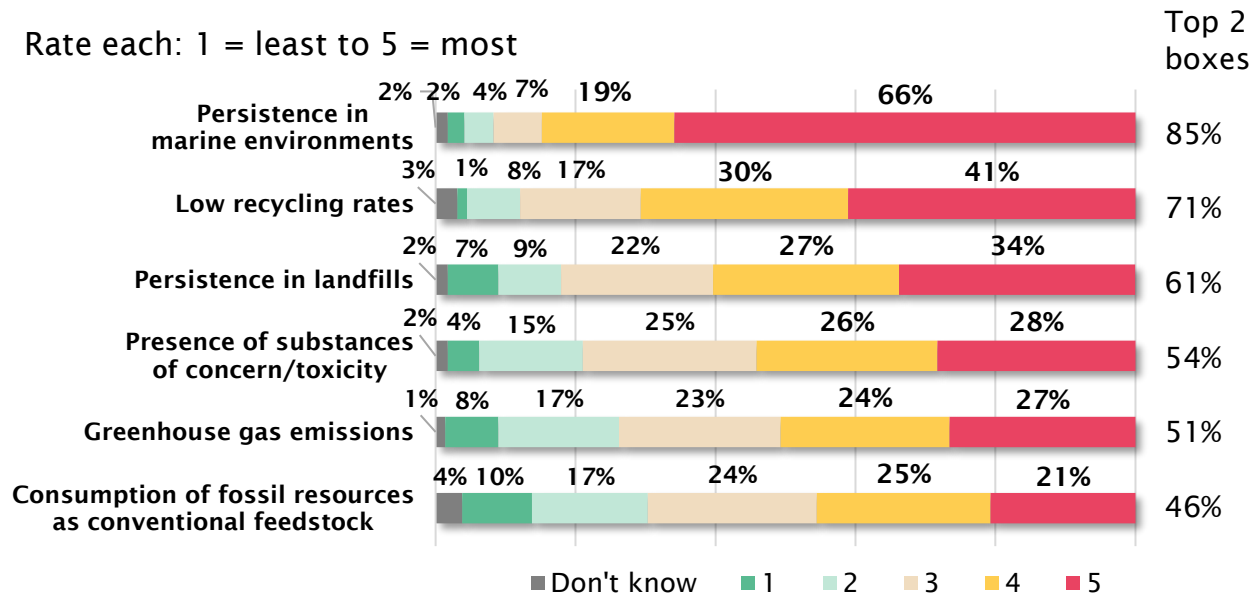
But if you think it's bad now, just wait. Nearly everyone taking the survey—93%—believes environmental concerns regarding plastic packaging will continue to grow.

Everyone agrees the climate is hot right now. But why is that? We dug deeper into the reasons by asking respondents to rate specific environmental concerns (see Chart 4 on the next page).

We already know marine debris is a main concern for many consumers and environmental groups. Turns out, our survey results show that it's top of mind with packaging professionals, too—so there's good synergy there. Two-thirds of survey respondents ranked marine debris 5 out of 5, saying it is the biggest and most pressing environmental challenge for plastic packaging.

4. How would you rate the severity of the following real or perceived environmental concerns for plastic packaging?

Rate each: 1 = least to 5 = most



Source: *Packaging Digest* 2018 Sustainable Packaging Study

At a distant second, the next top concern shows that recycling rates for plastic packaging aren't as high as everyone would like them to be. What's noteworthy is how the top two categories are tied together in interesting ways, which we'll address later in this report.

The lowest ranked item—Consumption of fossil resources as conventional feedstock—illustrates how most of the environmental aspects of plastic packaging are largely invisible to consumers. They probably don't even know that most plastics are made from natural gas or from fossil resources. And, certainly, consumers aren't talking a lot about greenhouse gas emissions.

Also note how the top three concerns all deal with plastic packaging at the *end* of its lifecycle, which is what is most visible to consumers.

5. Rate these actions according to your belief that they will alleviate the real or perceived environmental concerns of plastic packaging?

1=least effective; 5=most effective

TOP 2 BOXES	All Respondents
Increasing recycling rates	78%
Replacing conventional virgin content with post-consumer recycled content	58%
Replacing single-use plastic packaging with alternate options not made of plastic	57%
Replacing conventional fossil-based feedstocks with plant-based feedstocks	48%
Outright banning or regulating single-use plastic packaging	47%
Voluntarily eliminating symbolic single-use plastic packaging, like straws	43%

Source: *Packaging Digest* 2018 Sustainable Packaging Study

So how should packaging professionals address these top concerns?

The chart above ranks answers by the Top 2 Boxes, meaning people who selected either 4 or 5 on a scale of 1 to 5, with 5 being most effective. “Recycle more” has a significant lead in a list of possible solutions, with 78% of all respondents saying they believe increasing recycling rates will help fix the eco concerns about plastic packaging.

The next highest solution at 58% is “Replacing conventional virgin content with post-consumer recycled content.” We know how critical that pull-through market is in helping recyclers succeed by closing the loop on the recycling system.

Next, just one percentage point below PCR is “Replacing plastic with a non-plastic alternative.” More than half of all respondents believe this is a viable option, perhaps acknowledging the anti-plastic pressure they feel.

A little less than half say bio-plastics can help. We’ll have more on that in a bit.

Next, just one percentage point down is “Bans or regulations.” That’s another area where we’ll share more data later in this report.

Before we move on, let’s look at how these actions align with one of the questions we ask in the general sustainability trends section of the survey: In what areas does your company have specific packaging sustainability goals, and what do you measure? We ask about both because measurement shows a company is taking that issue seriously and putting some strategy behind it.

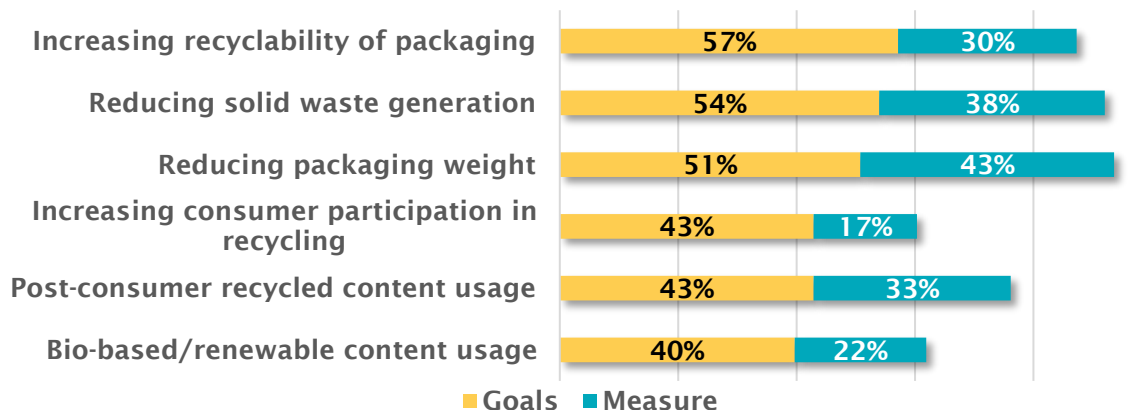
For the data in Chart 6, we separated out the responses from Brand Owners only. And this question relates to any type of packaging, not just for plastics.

At the top is “Increasing recyclability of packaging” with 87% of brand owners saying they either have a formal goal or they are at least measuring recyclability of their packaging. That lines up well with what respondents are saying about most important actions for plastic packaging specifically.

A possible disconnect, though, is with using post-consumer recycled content (second choice from the bottom). Recycling doesn’t work as a system unless there are end markets for the collected materials. The numbers aren’t abysmally low by any means: 76%, or more than three quarters, tell us they are either measuring how much recycled content they are using or they have a formal goal to hit a specific target. But less than half (only 43%) say they have formal goals for PCR usage.

Another interesting point from Chart 6: At the bottom, the number of respondents who have a goal for bio-based or renewable content or measure

6. In what areas does your company have specific packaging sustainability goals? And what do you measure? (Brand Owners only)



Source: *Packaging Digest* 2018 Sustainable Packaging Study

their bio-based or renewable content ($40\% + 22\% = 62\%$) is a step down from the PCR numbers ($43\% + 33\% = 76\%$). This shows that fewer companies focus on packaging at the beginning of its life than at the end of it.

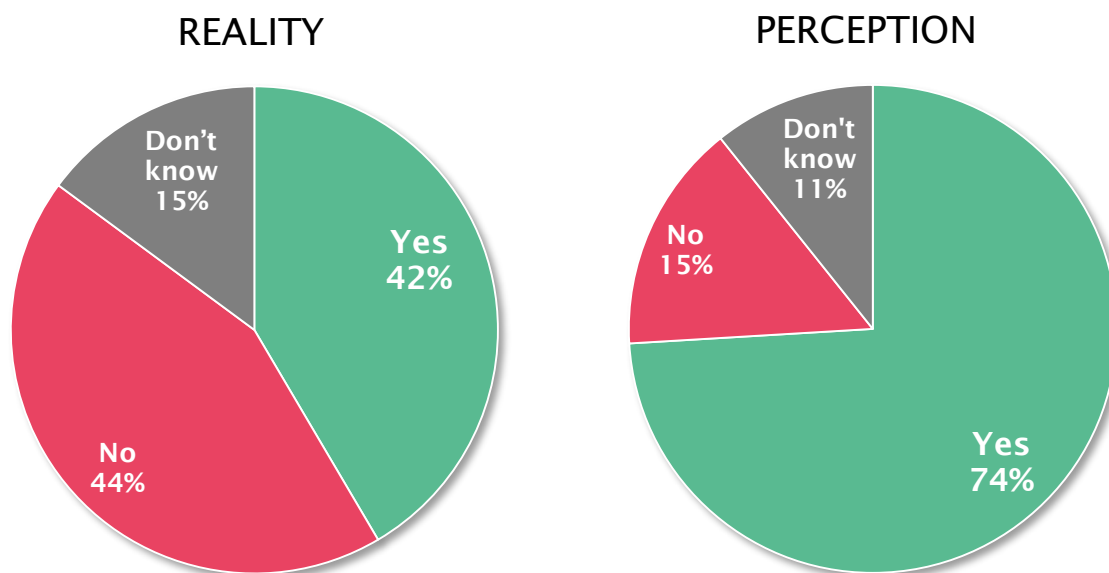
Again, these bio-based or renewable content numbers for *any type* of packaging line up well with similar numbers for *plastic* packaging.

So let's look at those bio-based or renewable content results for *plastic* packaging.

BIO-BASED PLASTICS

We asked respondents if bio-based plastics improve the reality or the perception of plastics. Less than half (42%) say, yes, bio-plastics helps in reality. But nearly three-quarters (74%) say it will be *perceived* as an environmental improvement for plastic packaging. Quite a divide there.

7. Do you think the use of bio-based plastics improves the environmental reality or perception of plastics packaging?



Source: *Packaging Digest* 2018 Sustainable Packaging Study

It's a bit tricky to make sense of these answers because of the broad family of bio-based materials. When packaging professionals hear "bio-based," they might think of a biodegradable material. If plastic pollution in the ocean is the epicenter of environmental concerns, then biodegradability, in principle, sounds like a beneficial attribute. A biodegradable plastic in the ocean shouldn't be a problem, right? For some bio-based plastics, that may be true. Some bio-plastics are biodegradable, and some biodegradable plastics will biodegrade in marine environments over a certain time.

Currently, there is no standard test for marine degradability for all conditions in which plastic would end up in marine environments. ASTM's [standard D6691](#) tests biodegradation of plastics under certain conditions, but the organization recognizes there is significant variability in the nature of exposure of plastics in marine environments.

A Keep America Beautiful study revealed that, when packaging is marketed as being biodegradable, consumers are more likely to litter it. Surely, we don't want to encourage marine litter-friendly plastics.

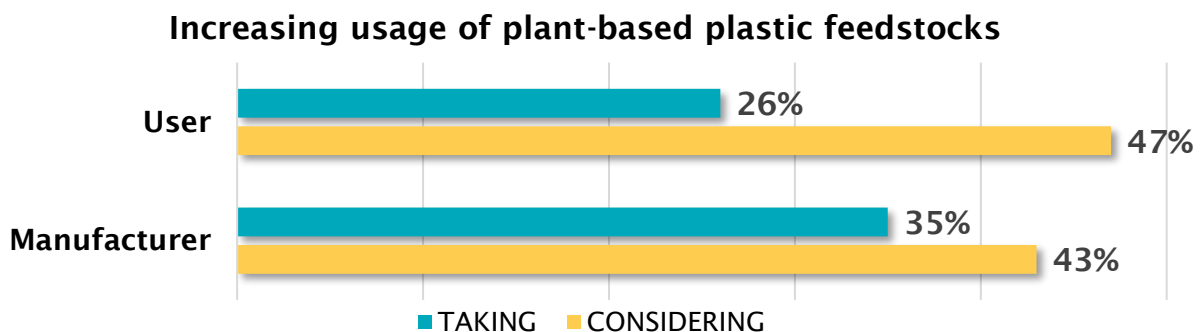
The other type of bio-based plastics are not biodegradable at all. They are bio-based equivalents of conventional polymers, like polyethylene (PE). Partially bio-based polyethylene terephthalate (PET) is the most prevalent bio-based plastic on the market by far—Coca-Cola's PlantBottle, for example. Bio-based PE or PET is chemically indistinguishable from its conventional, fossil-based alternative. It's an improvement at the beginning of life because it replaces fossil-based feedstocks with renewable feedstocks for less greenhouse gas emissions and less fossil-fuel consumption. But these bio-based plastics do nothing to affect the end of the lifecycle when plastic packaging is recycled or landfilled. We hope it doesn't become litter, but some does. And we know litter ends up in our waterways and out in the ocean.

These are definitely things to consider about bio-based plastics in today's environmental reality.

Even though only about a quarter of respondents who use plastic packaging say they are already increasing the amount of bio-based plastic, almost twice as many say they are considering upping the amount of plant-based plastic feedstock they use.

But the entire packaging community was invited to take the survey, so a fair number of plastic packaging manufacturers also answered this question. The results are a little different when comparing users versus manufacturers, but not shockingly so.

8. Are there any actions your company is taking, or considering taking, in response to the recent swell of sentiment against plastic packaging?



Source: *Packaging Digest* 2018 Sustainable Packaging Study

Versus Users, slightly fewer Manufacturers are considering using more plant-based feedstocks—43% compared to 47% (the yellow bars). But that could be because more plastics manufacturers say they are already increasing their use of bio-plastics—35% versus 26% of the Users.

In Chart 6 on p.11, which shows general corporate sustainability goals (not specific to *plastic* packaging), 40% indicated they have goals for using bio-based or renewable content.

Clearly, packaging professionals are looking seriously at bio-plastics, as more technologies are commercialized; as more suppliers mean additional sourcing options; and as costs come down and performance goes up.

Now, let's look at the results of the Recycling section.

RECYCLING

In Chart 4 on p.9, respondents rate their concerns about plastic packaging and the environment. To remind you, 71% of respondents say that “Low recycling rates” are a big reason plastic packaging is taking heat today. And rightly so.

According to the Environmental Protection Agency’s [Facts and Figures Report](#) released this year in August, in the U.S., plastic containers and packaging overall had a 14.6% recycling rate in 2015. High-density polyethylene (HDPE) and polyethylene terephthalate (PET) containers were higher, both around 30%. In Europe, plastic packaging recycling hit nearly [40% in 2016](#), according to the industry association [PlasticsEurope](#). But that means the majority of plastic packages are not being recycled.

Yet quite a lot of survey respondents think recycling might be the best thing to help improve plastic packaging’s eco image: 78% of all respondents selected either 4 or 5 on a scale of 1 to 5, with 5 being most effective, saying “Increasing recycling rates” is the answer. And 58% of respondents say PCR can help a lot.

9. Rate these actions according to your belief that they will alleviate the real or perceived environmental concerns of plastic packaging?

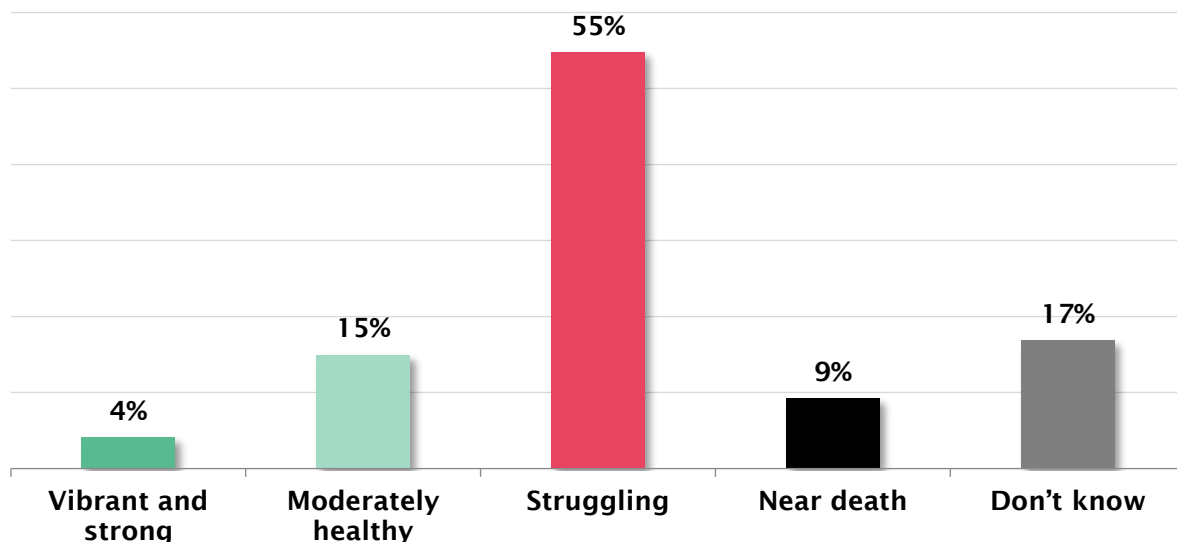
1=least effective; 5=most effective

TOP 2 BOXES	All Respondents
Increasing recycling rates	78%
Replacing conventional virgin content with post-consumer recycled content	58%
Replacing single-use plastic packaging with alternate options not made of plastic	57%
Replacing conventional fossil-based feedstocks with plant-based feedstocks	48%
Outright banning or regulating single-use plastic packaging	47%
Voluntarily eliminating symbolic single-use plastic packaging, like straws	43%

Source: *Packaging Digest* 2018 Sustainable Packaging Study

So, if recycling and using recycled content are seen as most effective, why aren't we doing more of it? Because, for the most part, it's not a lucrative business these days.

10. How would you describe the current state of plastic packaging recycling in the U.S.?



Source: *Packaging Digest* 2018 Sustainable Packaging Study

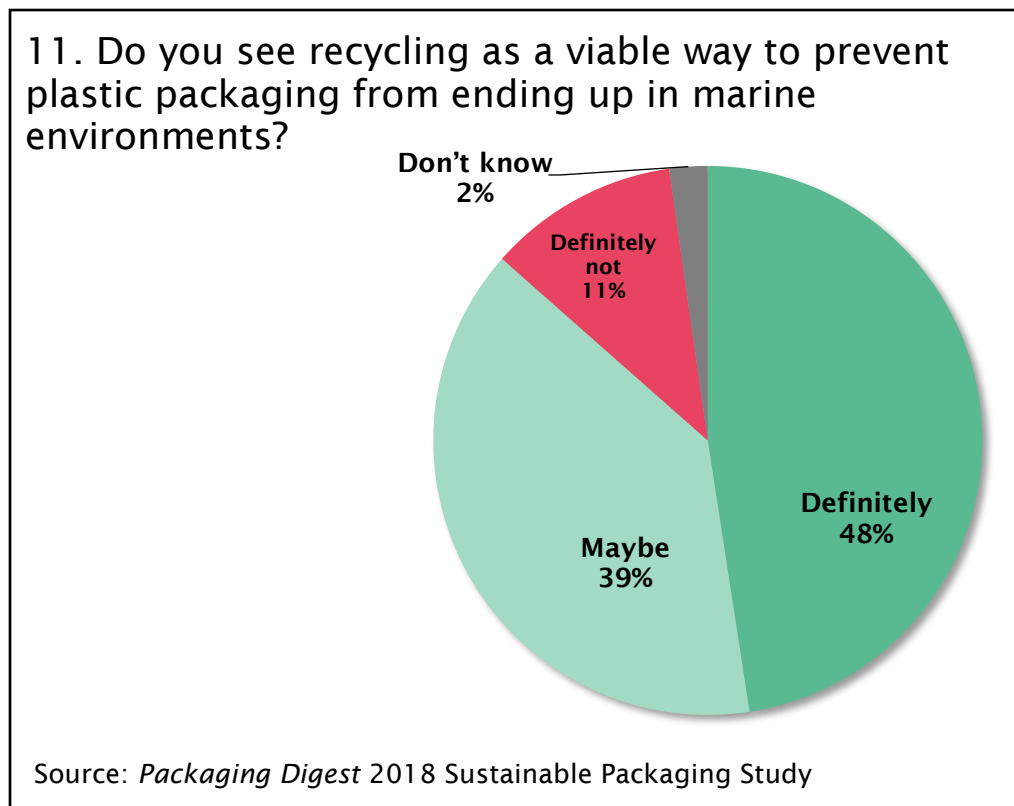
More than half of respondents, 55%, describe the current state of plastic packaging recycling in the U.S. as “Struggling,” with another 9% who say, “Near death.” Yes, plastic packaging recycling rates are low in America. But that’s the symptom, not the disease. The recycling industry needs to be self-sustaining and that means healthy markets for the materials that are collected.

Specific to the top-of-mind concern of plastic packaging waste in the ocean, we asked “Do you see recycling as a viable way to prevent plastic packaging from ending up in marine environments?”

According to the [Ocean Conservancy](#), the foremost organization understanding the relationship between plastics and the marine environment, the biggest contributors to the marine/ocean waste problem are in Southeast Asia: China, Vietnam, India and the Philippines. In those regions, the waste management system is under-developed and not much infrastructure. But there is also high willingness among the populace to collect anything in the waste stream that has value.

The lesson to learn is that, if we put value on plastic packaging at its end of life via recycling, then market forces will keep it from going into our waterways and oceans because of the financial incentive.

We asked respondents if this story holds water, to use a punny phrase. There is some skepticism over whether this strategy will be effective: A little less than half say, yes, if we can up our recycling, then we will see less plastics in the ocean. Another 39% say “maybe.” In theory, it makes sense. In practice, it remains to be seen, or even proven with scientific evidence.



Another option might be bans or regulations. Most packaging professionals have the opinion that industry must make this work—or face the alternatives.

We asked a follow-up question of the 11% of people who said recycling was “definitely not” a viable way to prevent plastic packaging from ending up in oceans, seas and rivers. We wanted to know “Why not?”

The answers range from blaming people who are too lazy to recycle to the reality of the oftentimes negative economics.

“People are basically lazy and will not take the effort to get it to the proper location. Have you seen the roadsides and beaches of California?”

“Human behavior & economics.”

“Complete BS. Not economically sustainable.”

And perhaps here’s an accidental benefit of no longer shipping our recyclables to China because of its Green Fence and National Sword initiatives. In hindsight, it’s makes perfect sense not to tempt fate by putting plastic recyclables on a boat in the first place.

“The evidence is floating in the ocean--curbside recycling has been around for decades and it hasn’t prevented this situation. In fact, if we are shipping our recyclables over the ocean, that’s a great way for plastic to end up in the ocean.”

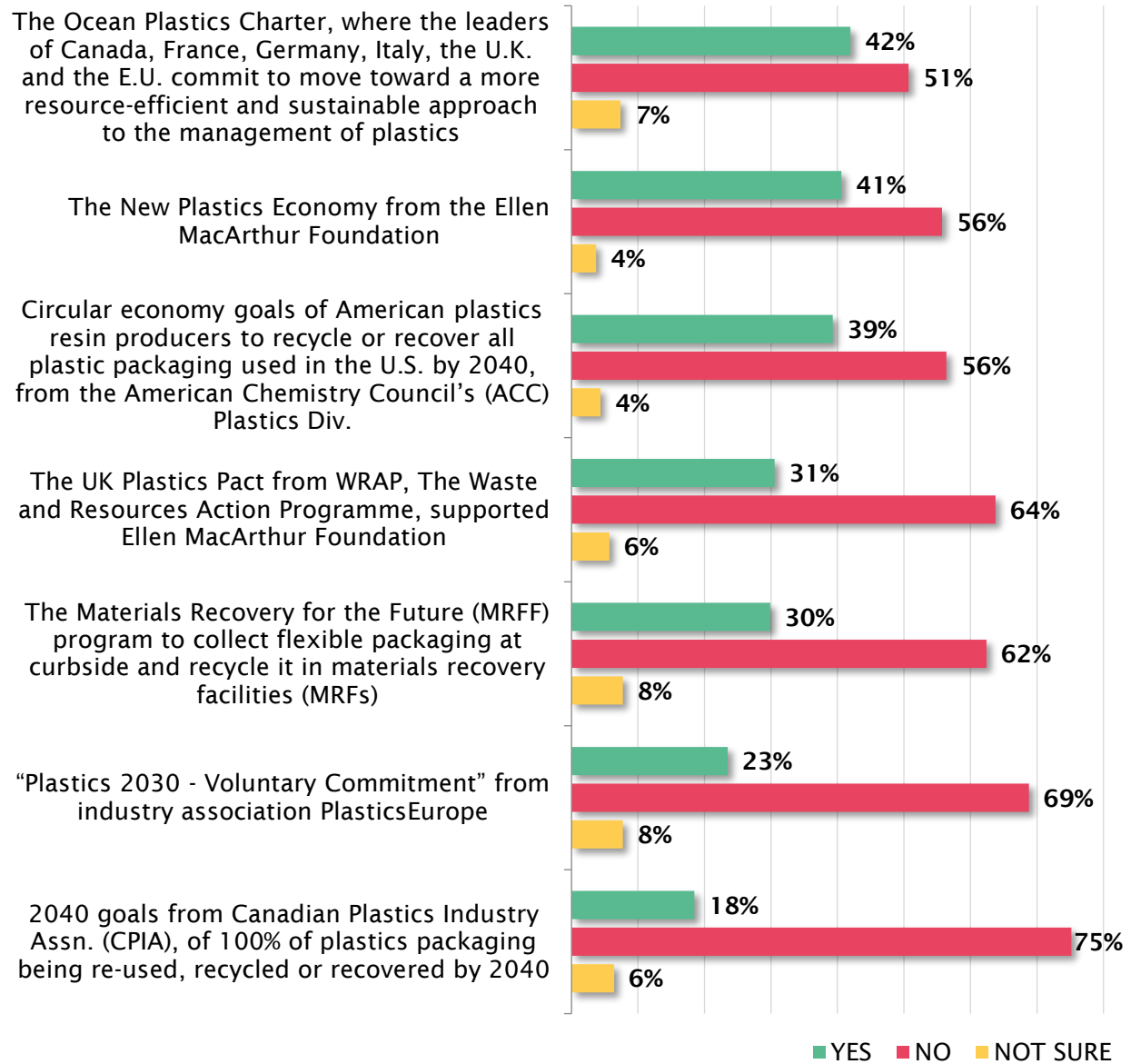
Many initiatives related to improving plastic packaging sustainability are in the works today. Which ones are getting the most attention from packaging professionals?

We asked respondents to review a list of efforts related to plastics in the oceans or with plastics recycling, believing there is a link between the two—the more plastics recycled, the less will end up in marine environments.

It’s interesting that more packaging professionals *are not* aware of these initiatives (see the red bars on Chart 12 on the next page) than *are*—and, in some cases, by a rather large margin. [Due to rounding, the numbers in this and other charts may not add up to 100%.] And it’s surprising that respondents are most familiar with the [Ocean Plastics Charter](#), initiated at the 2018 G7 Summit, an annual meeting of finance ministers from the world’s richest countries, known as The Group of Seven (G7). We would have thought The New

Plastics Economy—probably the most vocal of all plastics sustainability initiatives—would have been the most well-known.

12. Are you familiar with these plastic packaging initiatives?



Source: *Packaging Digest* 2018 Sustainable Packaging Study

BANS AND REGULATIONS

The packaging industry in the U.S. has typically been against government interference, preferring to self-regulate. But almost half of our survey respondents, 47%, say they believe bans or regulations will help ease the real or perceived environmental concerns of plastic packaging.

13. Rate these actions according to your belief that they will alleviate the real or perceived environmental concerns of plastic packaging?

1=least effective; 5=most effective

TOP 2 BOXES	All Respondents
Increasing recycling rates	78%
Replacing conventional virgin content with post-consumer recycled content	58%
Replacing single-use plastic packaging with alternate options not made of plastic	57%
Replacing conventional fossil-based feedstocks with plant-based feedstocks	48%
Outright banning or regulating single-use plastic packaging	47%
Voluntarily eliminating symbolic single-use plastic packaging, like straws	43%

Source: *Packaging Digest* 2018 Sustainable Packaging Study

Are bans or regulations effective in solving our eco concerns about plastic packaging? Not always, as survey respondents indicate. Here's a selection of answers with commentary.

“Consumers will always look for the easier and cheaper.”

Consumers probably won't be willing to pay more.

“The notion of future bans is driving CPGs to commit to greater sustainability, with many committing to a specific date to comply with goals.”

And sometimes just the threat of a ban or regulation spurs consumer packaged goods companies to act.

“If the industry is not allowed to use [certain plastics], they will turn to other solutions, which may or may not be better alternatives.”

If there is a ban, there’s no guarantee the alternatives will be any better. Every packaging material, regardless of its characteristics, is going to have some type of unwanted impact on the environment—be that emissions or resource consumption metrics. There is always something we prefer not to have there. Just because a material is not plastic doesn’t automatically mean that it’s going to be better.

And it’s hard to classify all plastic packaging together. Regarding some single-use plastic packaging, it’s easy to think we could just do without that, and we don’t need an alternative. *Removal* is different from *replacement* of a functionally equivalent item made of a substitute material. This is an area where we need to zoom out and take a holistic view of material choices.

“Demand for convenience items.”

We all know consumers don’t want to give up convenience, if that indeed happens.

“It is a good start to banning all plastic packaging. But only a start.”

But anti-plastic sentiment is strong with many people.

“Voluntary efforts often fall flat if they cost more. Mandates are sometimes the only way to get penny pinchers to move on something.”

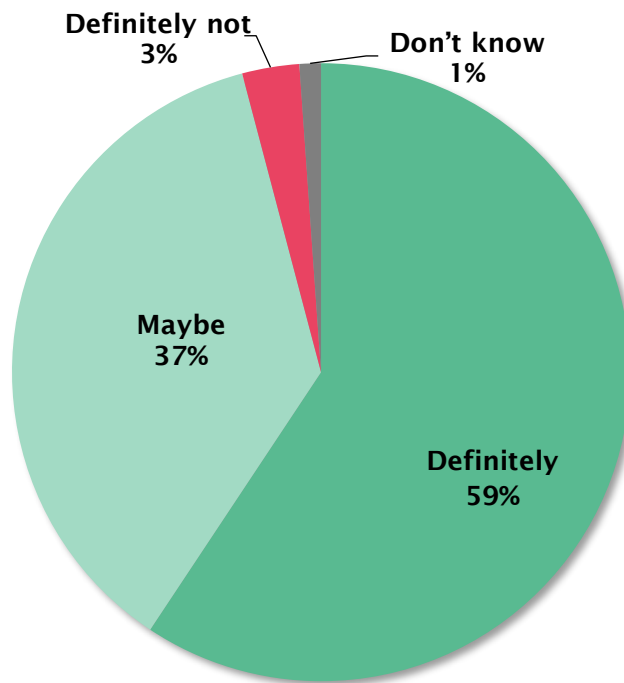
And the reality is most companies don't act unless forced to.

“They will be effective only if they are federal-level bans.”

However, we don't agree that only federal-level bans will be effective. States like Vermont and California have no problem passing and enforcing bans.

Moving forward, survey respondents expect to see even more bans on plastic packaging. That affirms what we all instinctively know is in the future.

14. Do you expect to see additional bans on plastic packaging?



Source: *Packaging Digest* 2018 Sustainable Packaging Study

A mere 3% of respondents say they definitely do not expect more bans—and, quite frankly, we're a little surprised to see even that small number.

We asked people to look into their crystal ball and tell us what category of plastic packaging might be targeted next. The responses were varied, but there were some recurring items, specifically:

“Pouches and flexible packaging with multiple materials.”

You may recall the Materials Recovery for the Future (MRFF) initiative mentioned earlier (Chart 12 on p.20). This program is working on collecting flexible packaging at curbside and recycling it in materials recovery facilities (MRFs).

“Well, it should be EPS foam.”

There are plenty of restrictive regulations and outright bans on expanded polystyrene materials, but several respondents mentioned EPS.

“Condiments packaging in its current state.”

Condiment packets are another package that's been targeted in the news lately as an example of avoidable waste.

“Detached bottle caps.”

California has proposed a bill that would require bottle caps to be tethered to containers because bottle caps are commonly found in beach cleanups. Also, closures are typically made from polypropylene (No.5 resin identification code), a material that has had a growing market for recycling. When and where appropriate, instructions on the [How2Recycle label](#) directs consumers to put caps back on bottles before putting them in their recycle bins so municipalities and recyclers can capture these smaller pieces of valuable PP.

“Coffee capsules.” [pods]

Efforts by coffee manufacturers and packaging suppliers have been ongoing to design/redesign single-use coffee pods for easier recycling or for composting.

“Clamshells. People do not like them.”

Clamshells are often used for bakery and foodservice, and present challenges for recycling because they can be made from several different materials.

“Water bottles.”

Like other beverages, most water bottles are PET, which has one of the highest recycling rates. Many consumers have recently switched from single-use plastic water bottles to reusable containers. But a ban on water bottles would negatively affect the PET bottle recycling business.

“Not sure.”

Many respondents admit they don’t know what materials might be targeted next. Perhaps that’s because there are so many possibilities or because it’s wishful thinking that nothing more will be singled out.

What ties these answers all together, though, is that they are packaging either commonly found as litter in the natural environment or they are materials that are challenging in the recycling system.

The New Plastics Economy has put forth a loose definition of “unnecessary” or “problematic” single-use plastic packaging—litter or recycling-challenged—and recommends eliminating these through innovation or redesign. This is in tune with survey respondents who can see those types of plastic packaging to be the target of additional bans.

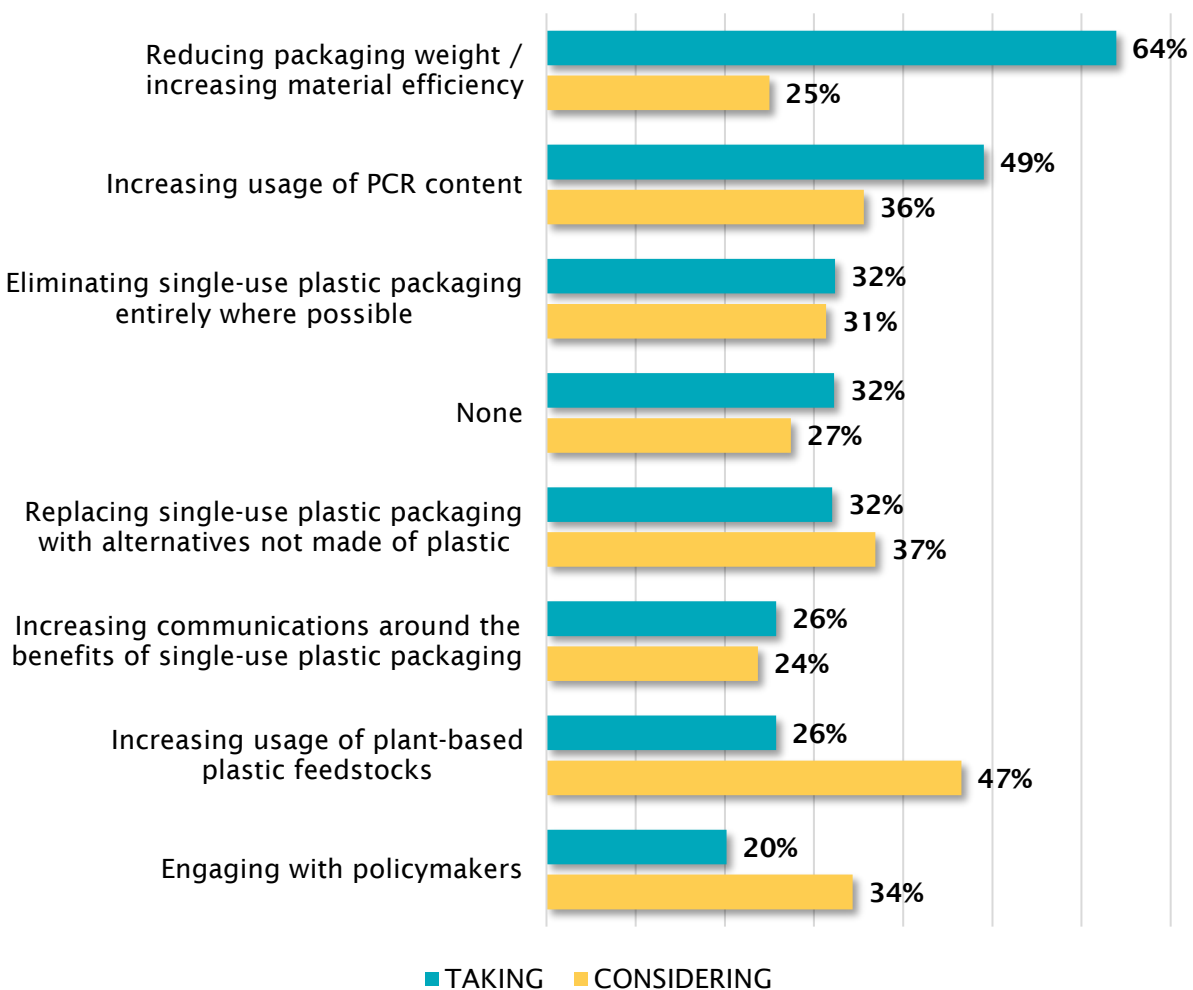
What are companies doing or should they be doing in response to anti-plastic movements or to counter their negative influence? They are taking action!

2. ACTIONS COMPANIES ARE TAKING OR CONSIDERING

Chart 15 shows answers from respondents taking the survey who said they *USE* plastic packaging, as opposed to respondents who *make* plastic packaging.

Actions these user companies are currently taking are shown in the teal bars in descending order. “Reducing packaging weight/increasing material efficiency” is

15. Are there any actions your company is taking, or considering taking, in response to the recent swell of sentiment against plastic packaging?



Source: *Packaging Digest* 2018 Sustainable Packaging Study

on top with 64% of companies taking this action. That makes sense when you consider that optimizing a package is the logical first step for any product.

But then we see a significant drop down to 49% for the second most-selected action: “Increasing use of PCR content.” It’s good to see nearly half of respondents are already increasing their use of post-consumer recycled content, which is needed to bolster the market for recovered recyclables. We need to drive that pull-through. And this has been an under-appreciated action that’s important for the health of package recycling, especially for plastics.

The next three actions were each selected by 32% of respondents. Again, we see a pretty substantial drop from 49% to 32%: 17 percentage points. Eliminating plastic packaging where possible or replacing it with non-plastic options tied with companies taking no action in response to the swell of anti-plastic packaging sentiment.

About a quarter of respondents, 26% to be exact, have been vocal in their communications about the benefits of plastic packaging or have boosted the amount of bio-plastic they use.

And at the bottom of the list, just 20% of respondents are engaging with policymakers.

But what’s really interesting about this chart is when you look at the actions companies are *considering* because of plastic packaging’s negative environmental image. The top action, at 47%, is to increase the use of bio-plastics. Does this sound familiar to you? It should. We pulled out this data for you earlier in Chart 8 (see p.14) when we were talking about the Attitudes and Challenges of bio-based plastics. We compared the User data with the Manufacturer data.

The next action companies are considering is to replace plastic packaging with non-plastic alternatives, according to 37% of respondents.

PCR content ranks fairly well, too, with 36% of respondents saying they are considering using more recycled content.

And another significant difference in the data is the 34% who said they are considering engaging with policymakers. That’s quite a jump from the 20% who are currently doing so.

How do these actions compare with what companies are doing for sustainability in general anyway?

In the General Sustainability Trends section of our survey—that is, where the questions are not focused on *plastic* packaging but instead cover *all* packaging—we asked an open-ended question: “What action(s) is your company taking to accomplish its sustainability tasks?”

Answers range from being highly organized to doing the bare minimum—or even admitting to greenwashing:

“We have a Sustainability Team. Then company has 2020 goals developed.”

“We are formulating a task force surrounding sustainability, which involves a stakeholder at each plant.”

“Aggressive sourcing of clean recycled materials.”

“Redesign.”

“Evaluating bio-based resins and reducing gauge/material usage.”

“Eliminating plastic where possible.”

“[We] follow the rules and regulations.”

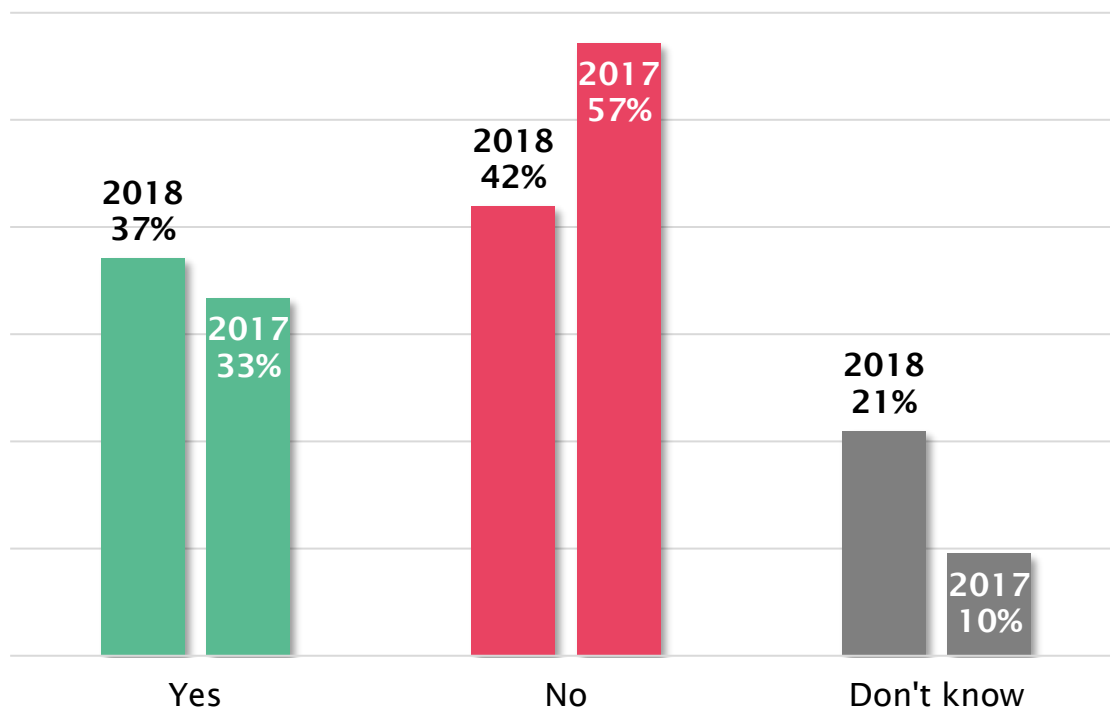
“Participate with industry.”

“Greenwashing.”

Do companies feel they have enough personnel to get their sustainable packaging projects done? We asked this question in the General Sustainability Trends section, so this data again is not specific to plastic packaging. But it’s still relevant because many companies are focused on plastic packaging sustainability these days.

We asked this question for the first time last year and saw some interesting numbers from the Brand Owner respondents. Last year, more than half said “No,” they didn’t have the people they needed. That has dropped 15 percentage points to 42% this year. And the percentage of respondents who say, “Yes, we have the appropriate staff” went up a bit from 2017. It’s at 37% now, up from 33% last year. So, both numbers are going in the right direction.

16. Do you feel your company has the appropriate staff for sustainable packaging tasks?



Source: *Packaging Digest* 2018 Sustainable Packaging Study

Is the work load not as daunting now compared to about a year ago? That’s hard to believe based on the activity we’re seeing in corporations relating to sustainable packaging. Do they have more staff now? Perhaps. Many companies have been hiring for growth as the economy has improved.

But twice as many people this year than last say they don’t know if they are staffed appropriately or not.

We did, however, get more insight into why 42% of Brand Owner respondents feel they don't have either enough or the right people in the job. We followed up with the open-ended question "Why not?" Here are some answers:

"Company is still not realising [sic] the importance of sustainable packaging."

Sadly, some companies are still not sold on the value of sustainable packaging.

"Currently focus[ed] on other strategic initiatives, like quality improvement, capacity, etc."

Some companies have more pressing concerns.

"Sourcing from overseas--hard to manage supply chain and focus on low-cost solutions for healthcare."

We also know that different markets experience issues unique to them.

"No dedicated sustainability associates."

And how many hats does a single person wear these days at work? It could be quite a bit.

"Spread too thin. No dedicated packaging professionals."

Companies need to realize that multi-tasking isn't as effective as it was initially thought to be.

3. SPC MEMBER DIFFERENCES

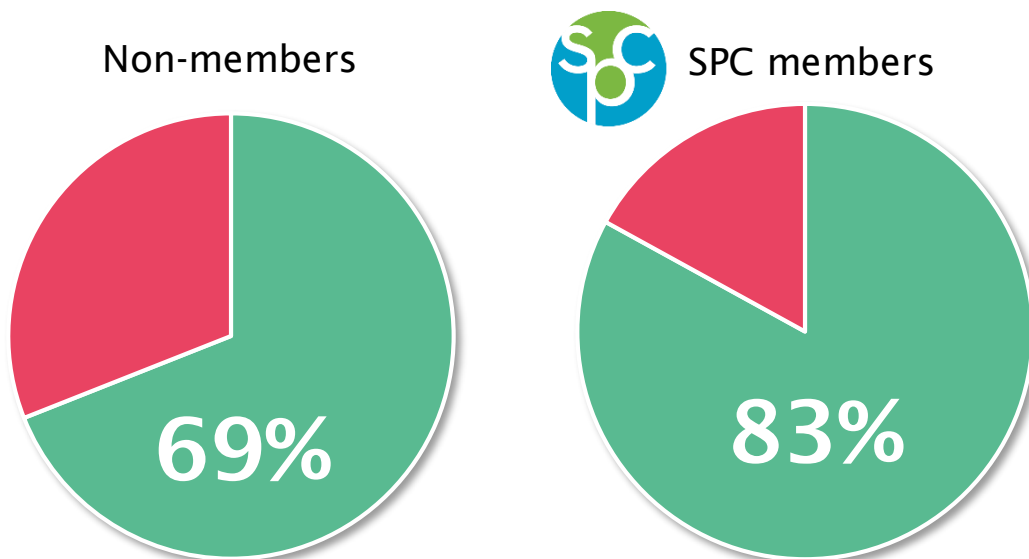
We ask survey participants if they are a member of the Sustainable Packaging Coalition. When we filter the responses by members versus non-members, we can see how members are thinking differently.

Generally, SPC members think the current situation is even scarier than non-members do, but they're not moving away from plastics—they don't think eliminating or replacing plastic packaging is the answer. They are making the changes they believe are needed—such as increasing use of post-consumer recycled content or bio-based plastics.

SPC members are more than twice as likely as non-members to be familiar with the industry initiatives addressing plastics recycling and plastics in the ocean—and they believe these programs will be successful in addressing today's concerns. They also believe collaborative industry action will be effective in increasing the health of recycling and that recycling will help alleviate the problem of plastics in the ocean.

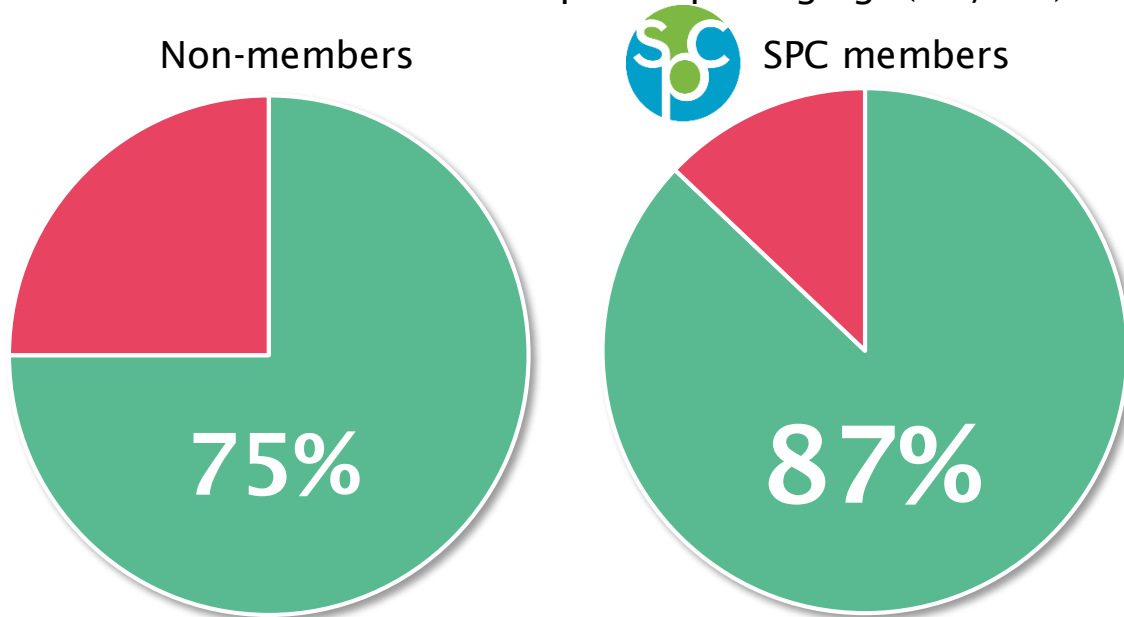
Here are the notable differences in the numbers comparing SPC members to non-members:

17. Do you believe environmental concerns for single-use plastic packaging are at an all-time high? (NO/YES)



Source: *Packaging Digest* 2018 Sustainable Packaging Study

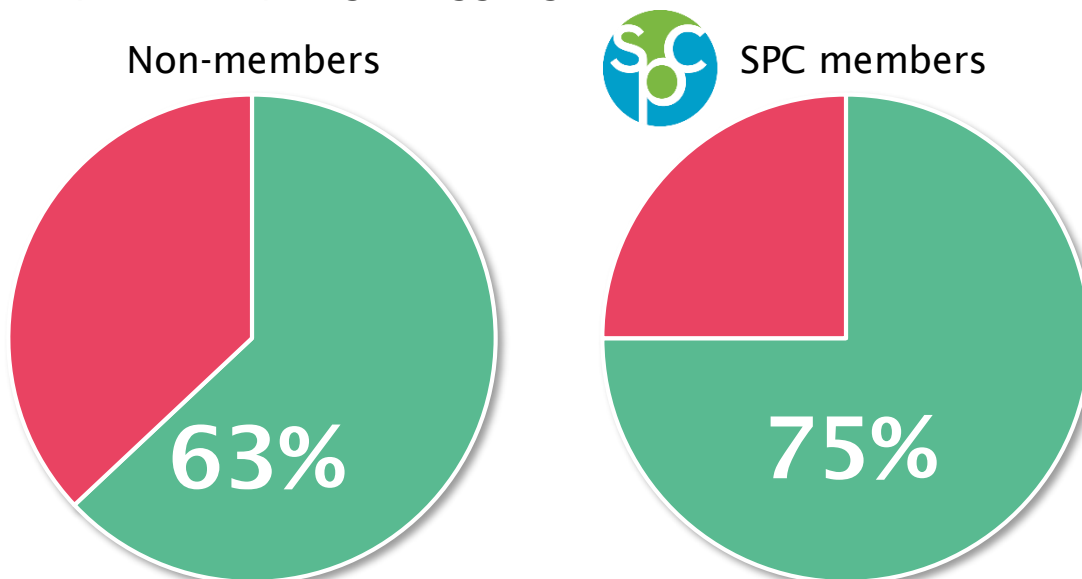
18. Do you believe **increasing recycling rates** will alleviate environmental concerns around plastic packaging? (NO/YES)



(‘YES’ represents respondents who selected either ‘4’ or ‘5’ on a scale of 1-5 where 5 corresponds with ‘most effect’)

Source: *Packaging Digest* 2018 Sustainable Packaging Study

19. Is plastic recycling struggling or near death? (NO/YES)

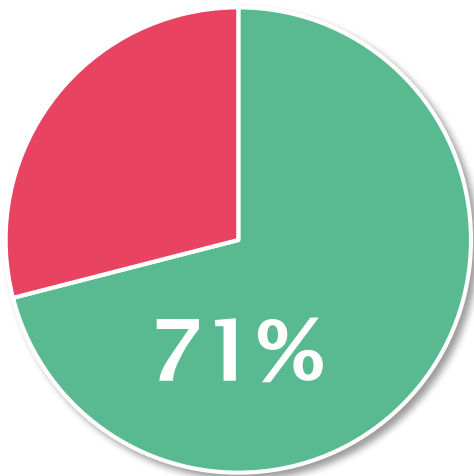


(‘YES’ represents respondents who selected ‘struggling’ or ‘near death’ when asked about the current state of plastic packaging recycling in the U.S.)

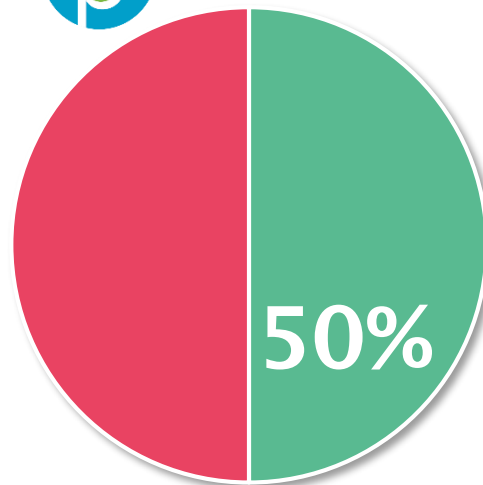
Source: *Packaging Digest* 2018 Sustainable Packaging Study

20. Are you **eliminating** single-use plastic packaging entirely where possible, or considering doing so? (NO/YES)

Non-members



SPC members

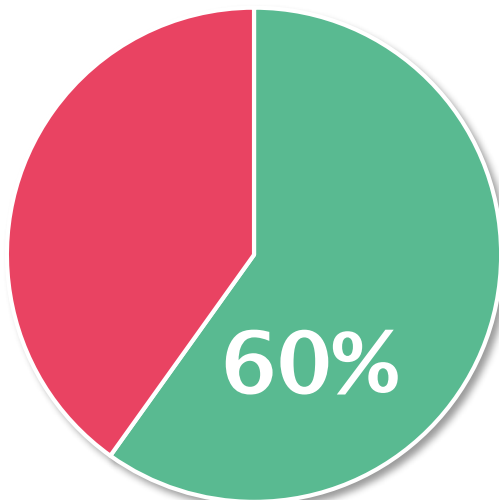


(‘YES’ represents respondents who indicated they are either taking or considering this activity)

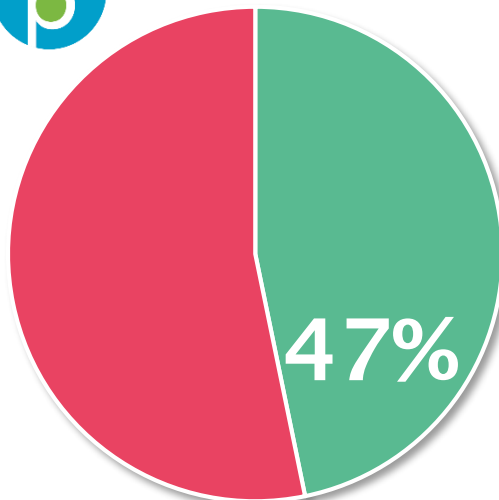
Source: *Packaging Digest* 2018 Sustainable Packaging Study

21. Do you believe **replacing** single-use plastic packaging with non-plastic alternatives will alleviate eco concerns? (NO/YES)

Non-members



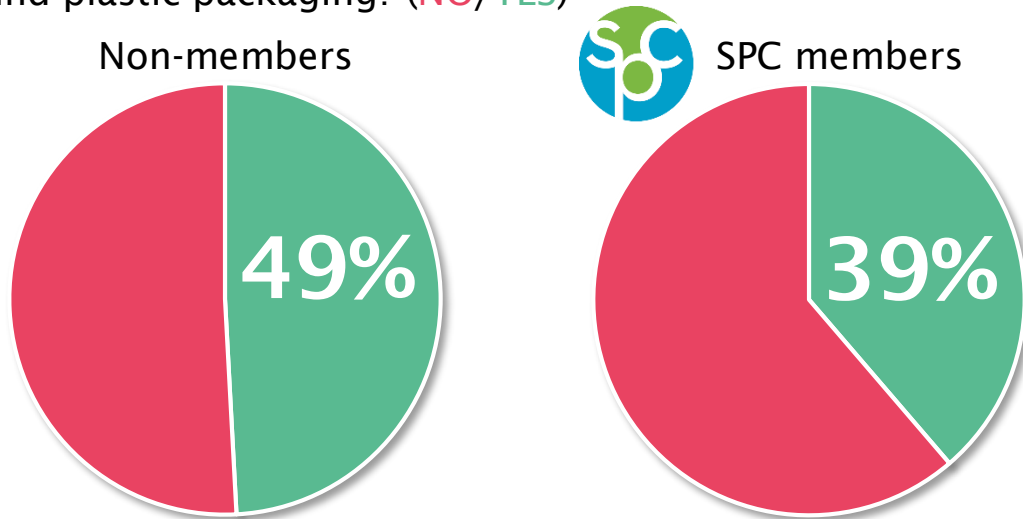
SPC members



(‘YES’ represents respondents who selected either ‘4’ or ‘5’ on a scale of 1-5 where 5 corresponds with ‘most effect’)

Source: *Packaging Digest* 2018 Sustainable Packaging Study

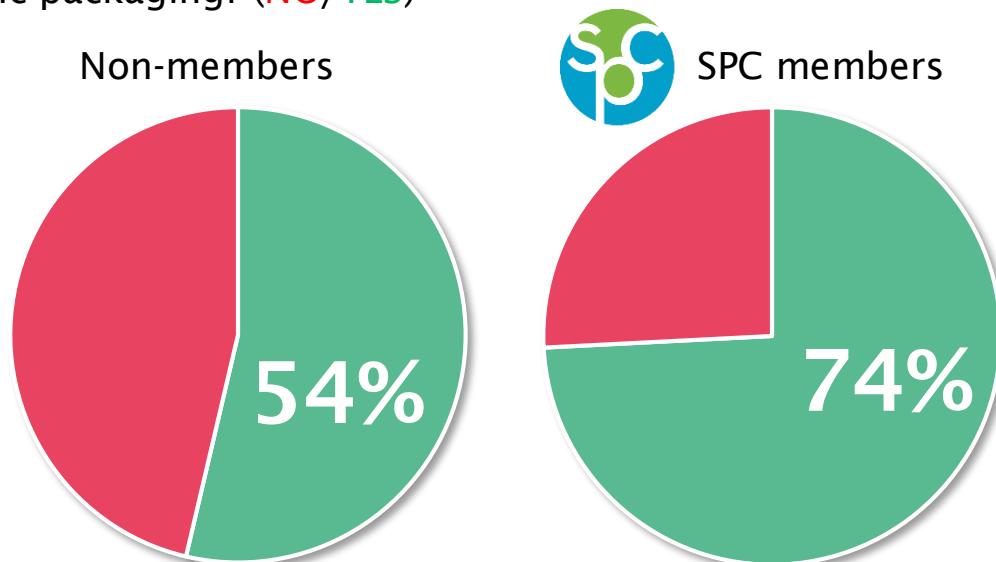
22. Do you believe outright **banning or regulating** single-use plastic packaging will alleviate environmental concerns around plastic packaging? (NO/YES)



(‘YES’ represents respondents who selected either ‘4’ or ‘5’ on a scale of 1-5 where 5 corresponds with ‘most effect’)

Source: *Packaging Digest* 2018 Sustainable Packaging Study

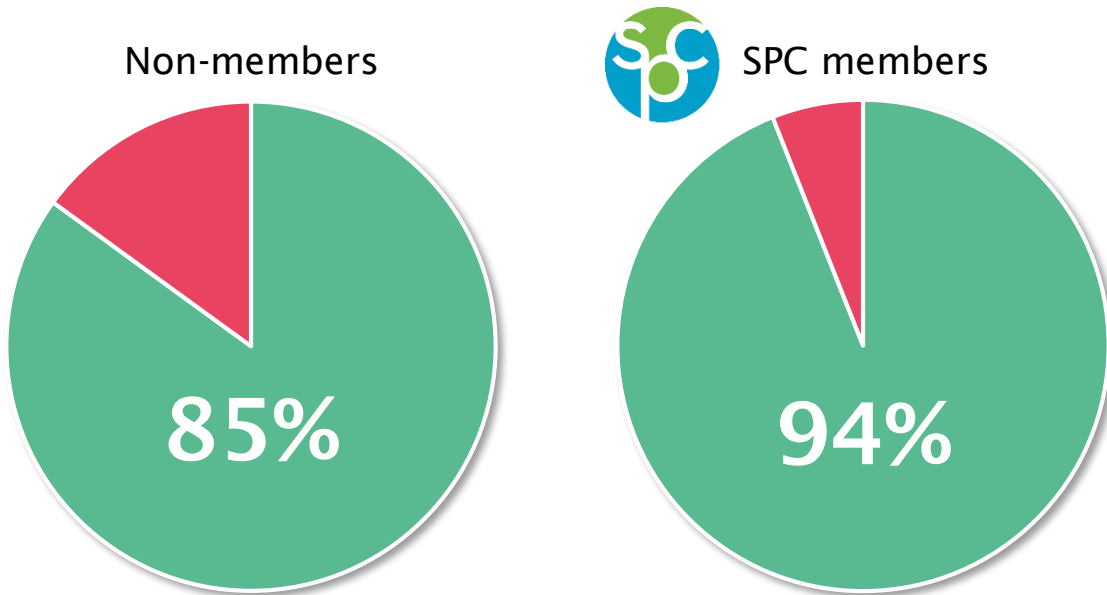
23. Do you believe replacing virgin content with **post-consumer recycled content** will alleviate environmental concerns around plastic packaging? (NO/YES)



(‘YES’ represents respondents who selected either ‘4’ or ‘5’ on a scale of 1-5 where 5 corresponds with ‘most effect’)

Source: *Packaging Digest* 2018 Sustainable Packaging Study

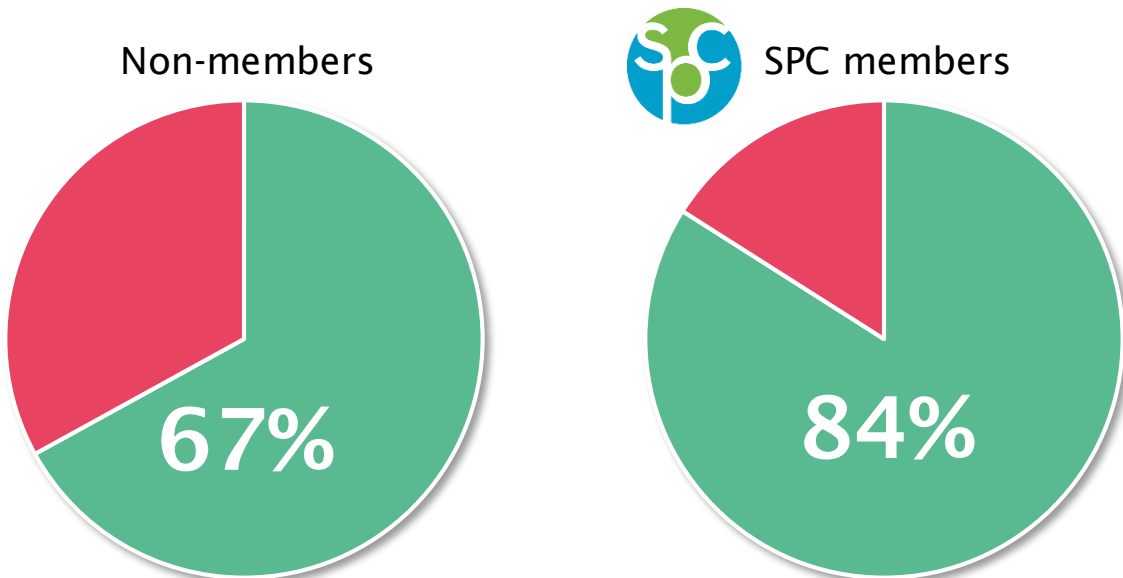
24. Are you increasing your **usage of post-consumer recycled content**, or considering doing so? (NO/YES)



(‘YES’ represents respondents who indicated they are either taking or considering this activity)

Source: *Packaging Digest* 2018 Sustainable Packaging Study

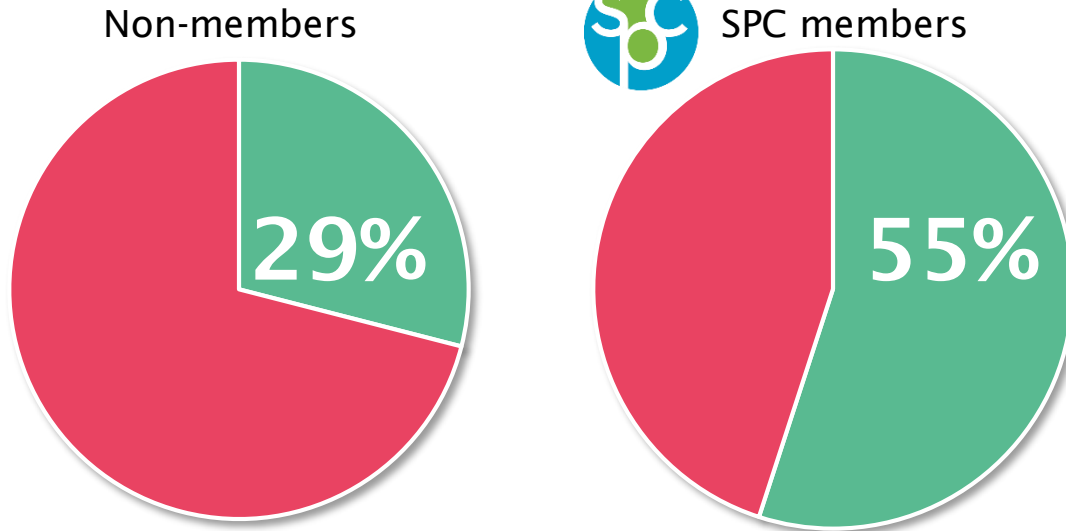
25. Are you increasing your **usage of plant-based plastic feedstocks**, or considering doing so? (NO/YES)



(‘YES’ represents respondents who are either taking or considering this activity)

Source: *Packaging Digest* 2018 Sustainable Packaging Study

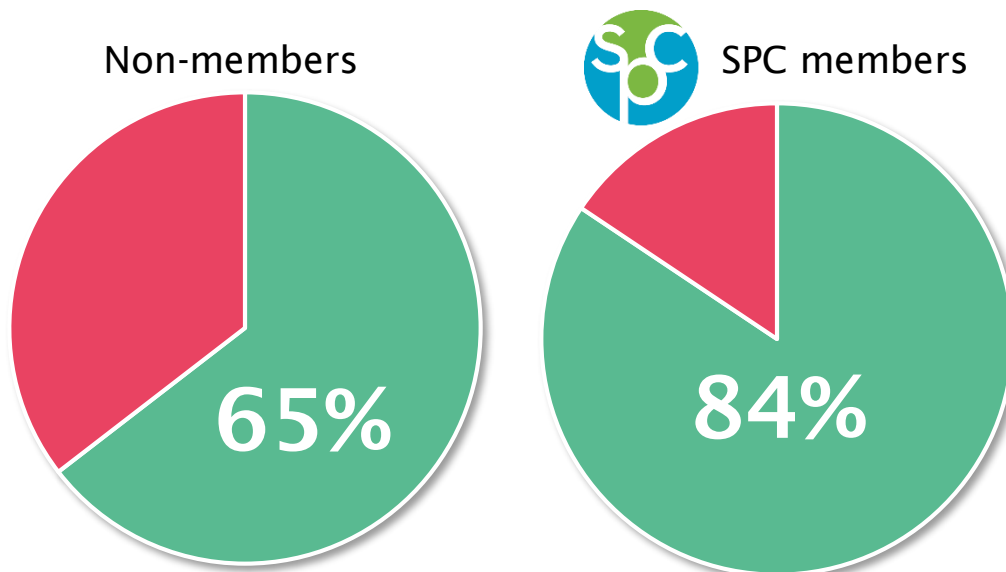
26. Are you familiar with these initiatives? [The New Plastics Economy, UK Plastics Pact, Materials Recovery for the Future, G7 Ocean Plastics Charter and/or the PlasticsEurope/CPIA+CIAC/ACC 2040 goals] (NO/YES)



(Average across all initiatives / not including respondents who selected 'don't know')

Source: *Packaging Digest* 2018 Sustainable Packaging Study

27. Do you think these initiatives will be successful? (NO/YES)



('YES' represents respondents who selected either 'somewhat' or 'very' successful)

Source: *Packaging Digest* 2018 Sustainable Packaging Study

4. RECOMMENDATIONS

Industry collaboration offers the best chance to improve plastic packaging's sustainability profile. Get involved!

We've already mentioned several initiatives:

- The [New Plastics Economy](#) from the Ellen MacArthur Foundation, which has massive global support for increasing recycling, increasing recycled content and eliminating “problematic and unnecessary” plastic packaging to effectively alleviate the environmental concerns of plastic packaging
- The [Ocean Plastics Charter](#), where leaders of Canada, France, Germany, Italy, the U.K. and the E.U. commit to move toward a more resource-efficient and sustainable approach to the management of plastics
- [Circular economy goals](#) of American plastics resin producers to recycle or recover all plastic packaging used in the U.S. by 2040, from the American Chemistry Council's (ACC) Plastics Div.
- The [UK Plastics Pact](#) from WRAP, The Waste and Resources Action Programme, supported Ellen MacArthur Foundation
- The [Materials Recovery for the Future \(MRFF\) program](#) to collect flexible packaging at curbside and recycle it in materials recovery facilities (MRFs)
- “[Plastics 2030 - Voluntary Commitment](#)” from association PlasticsEurope
- [2040 goals](#) from Canadian Plastics Industry Assn. (CPIA), of 100% of plastics packaging being re-used, recycled or recovered by 2040

Here are a few more ideas:

- [APR Demand Champions](#) from the Assn. of Plastics Recyclers, where companies commit to a specific numerical target of using recycled-content in their plastics
- The [Circulate Capital](#) investment fund for building recycling infrastructure in Southeast Asia, where the majority of plastic waste enters the ocean
- SPC's [How2Recycle Label](#), which gives consumers clear and simple directions on how to recycle or dispose of packaging once the product has been consumed
- [The Recycling Partnership](#), which works with industry and municipalities to improve recycling infrastructure and consumer participation

5. METHODOLOGY + DEMOGRAPHICS

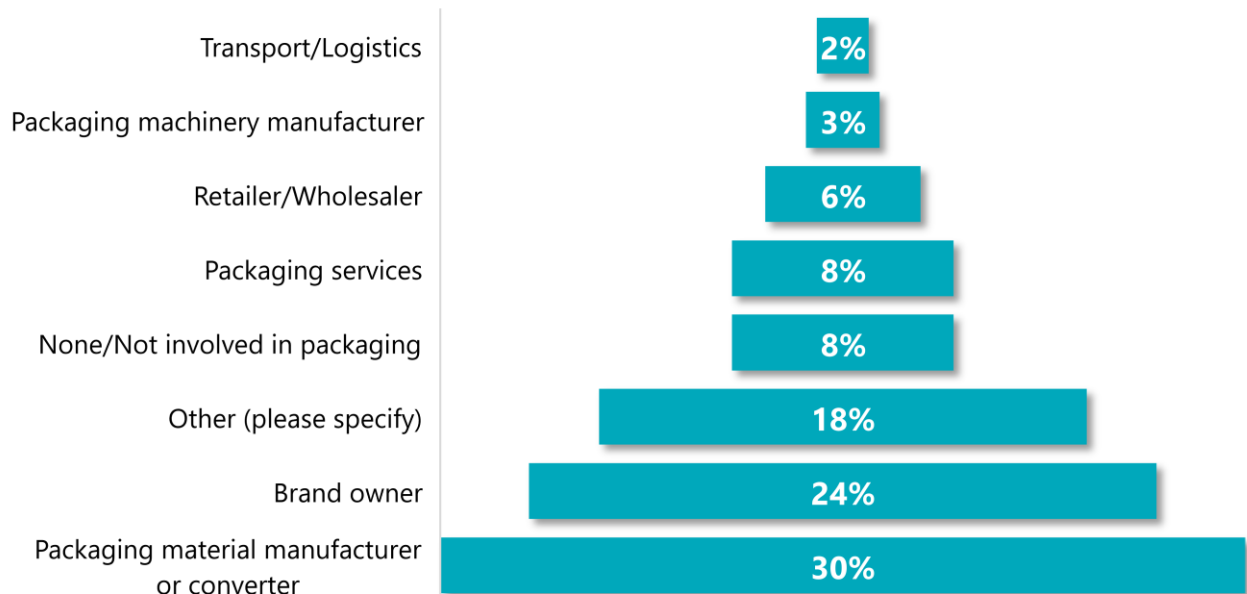
From July 30 to Oct 1, 2018, we invited audiences of *Packaging Digest* and sister publication *PlasticsToday*, as well as Sustainable Packaging Coalition members, to take our online survey. We also shared the survey link on social media: Twitter, LinkedIn and Facebook.

A total of 358 packaging, plastics and sustainability professionals completed the survey.



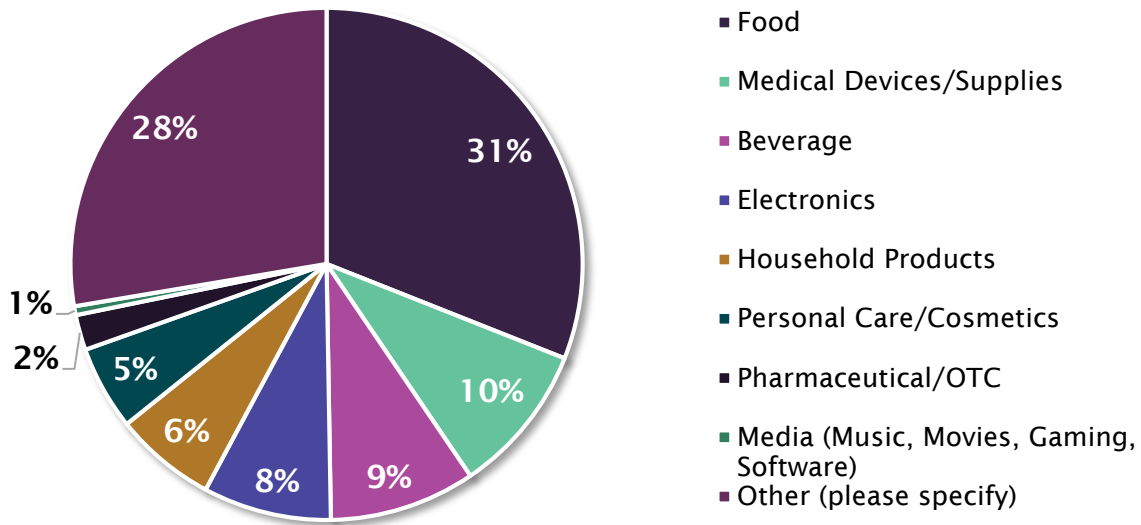
Following is a demographics breakdown of the respondents [Remember: Due to rounding, the numbers may not add up to 100%].

28. Respondents by type of company



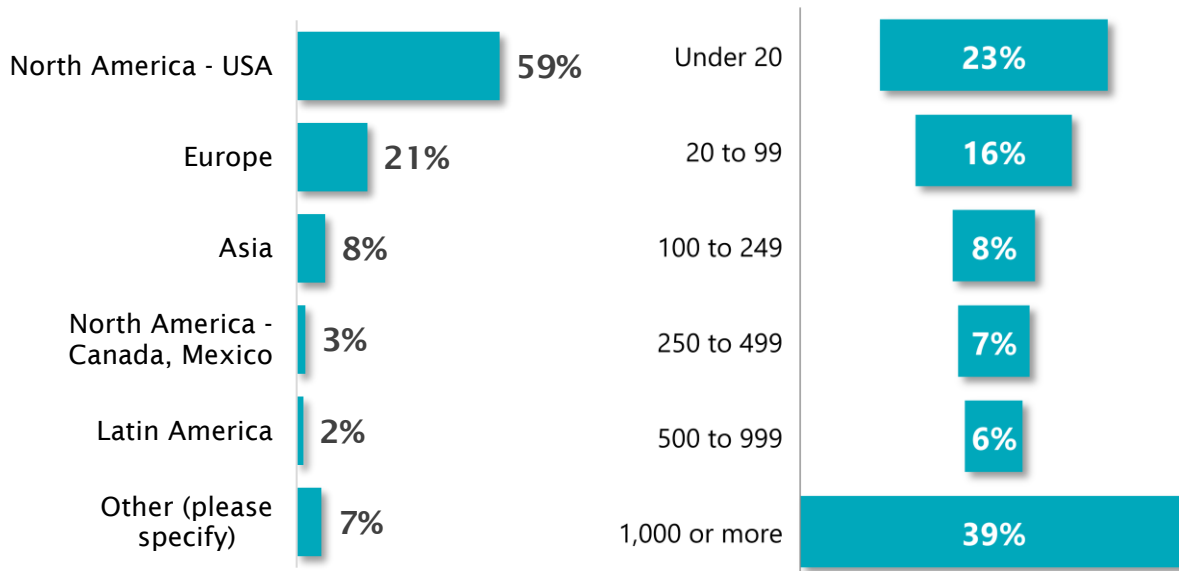
Source: *Packaging Digest* 2018 Sustainable Packaging Study

29. Respondents by market



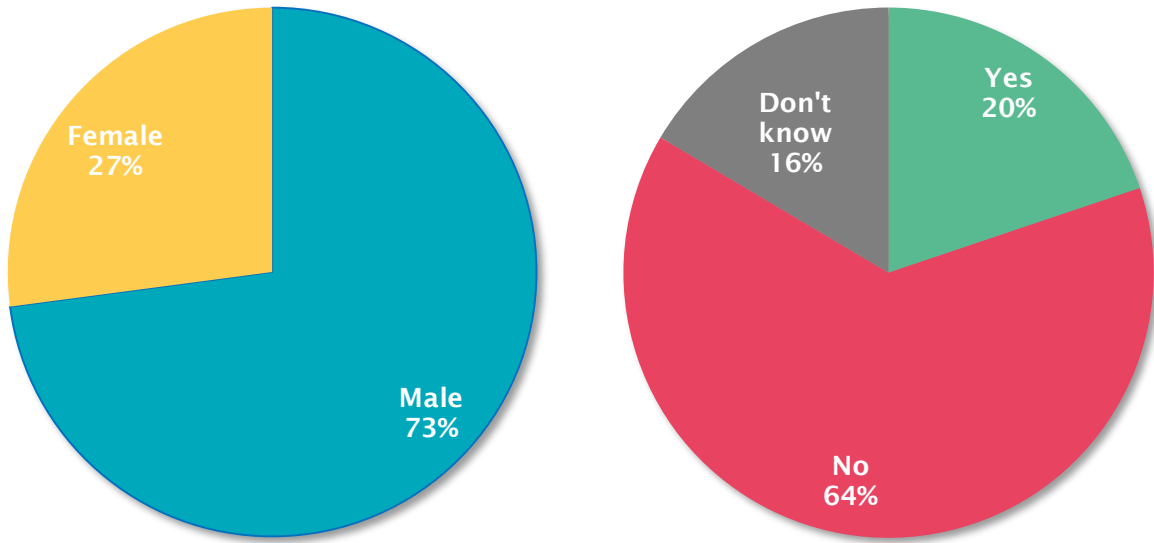
Source: *Packaging Digest* 2018 Sustainable Packaging Study

30. Respondents by company size and location of headquarters



Source: *Packaging Digest* 2018 Sustainable Packaging Study

31. Respondents by gender and SPC membership



Source: *Packaging Digest* 2018 Sustainable Packaging Study

6. LIST OF CHARTS

- 07 1. Rate your opinion on the current climate of environmental concerns around plastic packaging.
- 08 2. Do you believe environmental concerns for single-use plastic packaging are at an all-time high?
- 08 3. Do you believe environmental concerns regarding plastic packaging will continue to grow?
- 09 4. How would you rate the severity of the following real or perceived environmental concerns for plastic packaging?
- 10 5. Rate these actions according to your belief that they will alleviate the real or perceived environmental concerns of plastic packaging? 1=least effective; 5=most effective
- 11 6. In what areas does your company have specific packaging sustainability goals? And what do you measure? (Brand Owners only)
- 13 7. Do you think the use of bio-based plastics improves the environmental reality or perception of plastics packaging?
- 14 8. Are there any actions your company is taking, or considering taking, in response to the recent swell of sentiment against plastic packaging?
Increasing usage of plant-based plastic feedstocks
- 16 9. Rate these actions according to your belief that they will alleviate the real or perceived environmental concerns of plastic packaging?
- 17 10. How would you describe the current state of plastic packaging recycling in the U.S.?
- 18 11. Do you see recycling as a viable way to prevent plastic packaging from ending up in marine environments?
- 20 12. Are you familiar with these plastic packaging initiatives?
- 21 13. Rate these actions according to your belief that they will alleviate the real or perceived environmental concerns of plastic packaging?
- 23 14. Do you expect to see additional bans on plastic packaging?

- 26 15. Are there any actions your company is taking, or considering taking, in response to the recent swell of sentiment against plastic packaging?
- 29 16. Do you feel your company has the appropriate staff for sustainable packaging tasks?
- 31 17. Do you believe environmental concerns for single-use plastic packaging are at an all-time high? SPC members vs non-members
- 32 18. Do you believe **increasing recycling rates** will alleviate environmental concerns around plastic packaging? SPC members vs non-members
- 32 19. Is plastic recycling struggling or near death? SPC members vs non-members
- 33 20. Are you **eliminating** single-use plastic packaging entirely where possible, or considering doing so? SPC members vs non-members
- 33 21. Do you believe **replacing** single-use plastic packaging with non-plastic alternatives will alleviate eco concerns? SPC members vs non-members
- 34 22. Do you believe outright **banning or regulating** single-use plastic packaging will alleviate environmental concerns around plastic packaging? SPC members vs non-members
- 34 23. Do you believe replacing virgin content with **post-consumer recycled content** will alleviate environmental concerns around plastic packaging? SPC members vs non-members
- 35 24. Are you increasing your **usage of post-consumer recycled content**, or considering doing so? SPC members vs non-members
- 35 25. Are you increasing your **usage of plant-based plastic feedstocks**, or considering doing so? SPC members vs non-members
- 36 26. Are you familiar with these initiatives? [The New Plastics Economy, UK Plastics Pact, Materials Recovery for the Future, G7 Ocean Plastics Charter and/or the PlasticsEurope/CPIA+CIAC/ACC 2040 goals] SPC members vs non-members
- 36 27. Do you think these initiatives will be successful? SPC members vs non-members
- 38 28. Respondents by type of company

39	29. Respondents by market
39	30. Respondents by company size and location of headquarters
40	31. Respondents by gender and SPC membership