



# Inside the Mind of the Consumer

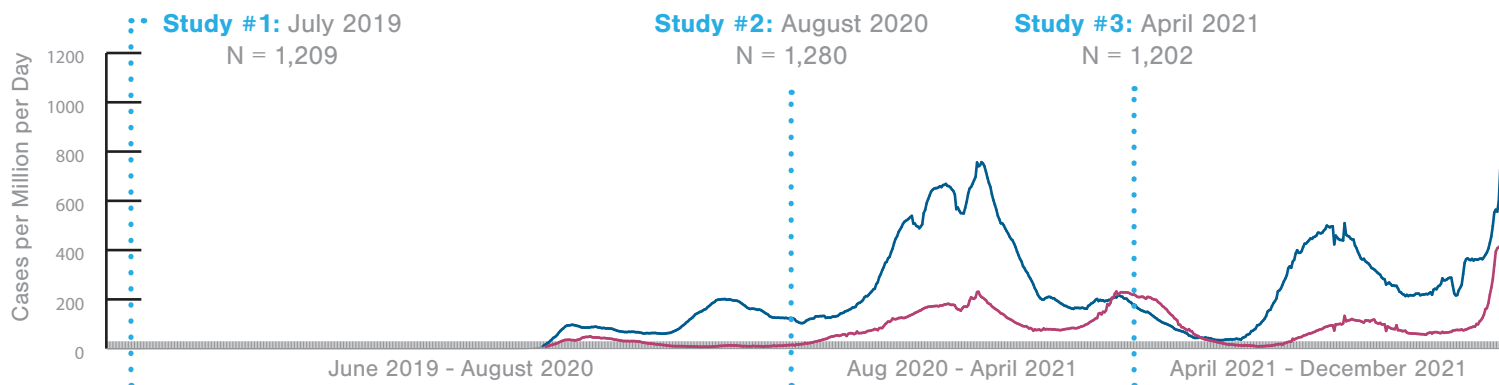
Shoppers increasingly value plastic packaging benefits, seek sustainable solutions

*by Eric Vignola, Market Management Leader and Brant Wunderlich, Caps and Closures Market Manager*



Against the backdrop of a lingering global pandemic, consumers are increasingly focused on sustainability. This is impacting their purchasing decisions, as they are more inclined than ever to value products featuring less packaging or packaging with post-consumer resin (PCR) content. These and other insights from the third annual consumer survey by NOVA Chemicals will help the industry develop packaging solutions that meet real, rather than perceived, consumer needs while moving toward a more sustainable future.

### COVID cases through 2021 (per million)<sup>1</sup> ■ US and ■ Canada



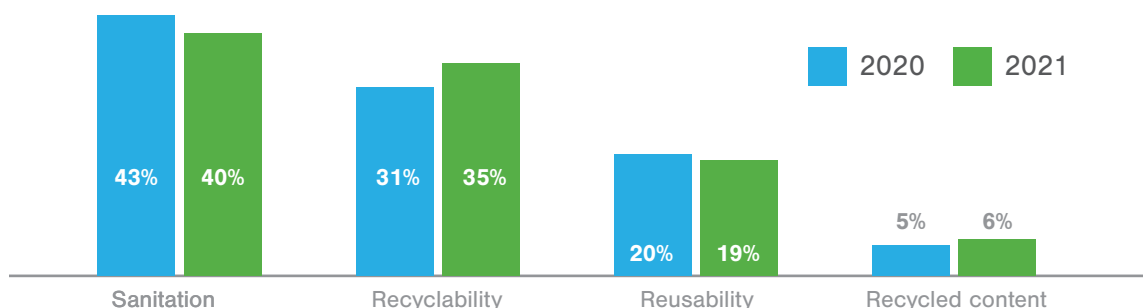
*NOVA Chemicals' survey program has captured an evolving pandemic-era consumer experience that impacts priorities and preferences for packaging and packaged goods.*



## Above All, Protect

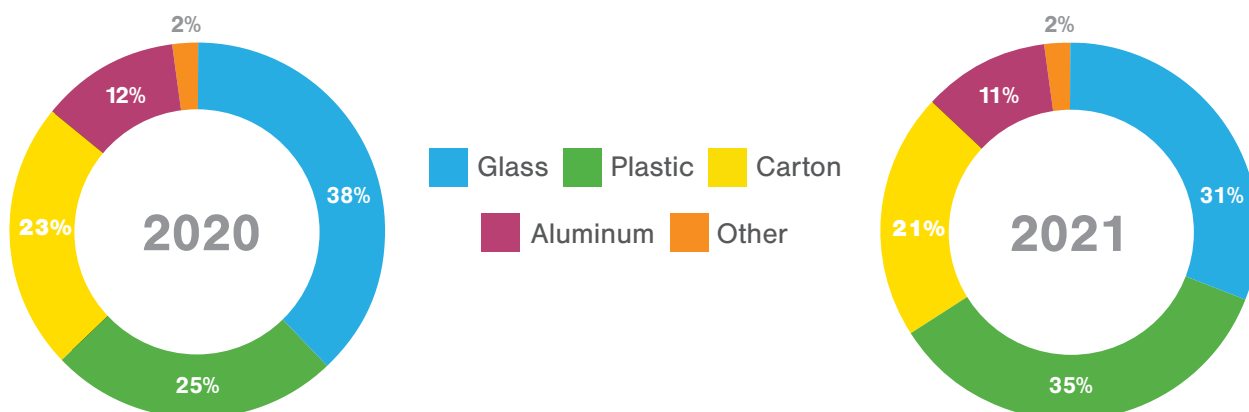
Consumers have always relied on packaging to provide a barrier between product and people. The onset of the pandemic saw them interact differently with the world, and highlighted the value of packaging for sanitation and safety. Throughout 2021, as we continued to recover from the initial shock of the pandemic, the value and importance of sustainability increased again, demonstrated through the increased importance of recyclability.

### Most Important Aspect of Plastic Packaging (Showing % Ranked #1 among total respondents)



As the impacts of COVID-19 lingered, consumer perceptions of plastics increased favorably. In 2021, plastic overtook glass as the ideal packaging material on this dimension.





















### Ideal Packaging Material from a Safe and Sanitary Perspective (% of total respondents)



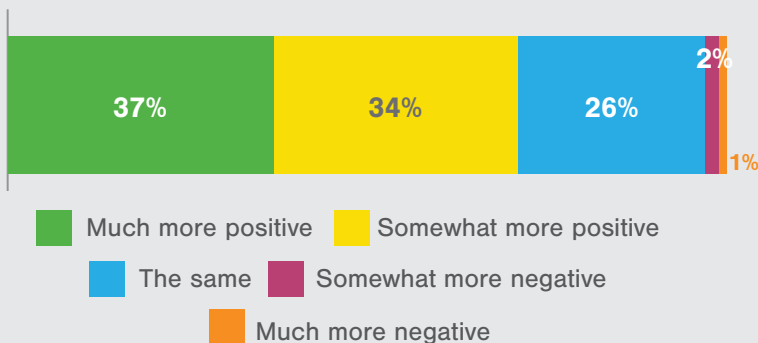
With protection and safety strongly resonating with consumers, brand owners and retailers have a receptive audience to build brand loyalty by promoting packaging safety and incorporating features such as tamper resistance.

## Facts Matter

To gauge how consumers' interpretation of detailed and complex information impacted their feelings toward packaging, survey participants were presented with the following infographic<sup>2</sup>. When then asked how they would feel about purchasing a product in a flexible plastic package after viewing the table below, 71% felt somewhat or much more positive.

	Fossil fuel usage (MJ-equivalent) '000	Greenhouse gas emissions (Kg-CO <sub>2</sub> equivalent) '000	Water usage (Liters) '000	Product to package (weight percentage)
 Flexible packaging	 89	 5	 12	 3%
 Composite carton	 95	 6	 72	 4%
 Aluminum	 276	 27	 92	 5%
 Glass bottle	 327	 26	 210	 35%

Based on the above data, how would you feel about purchasing a product in a flexible plastic package? (2021)



The significant shift of opinion when a consumer is presented with information about plastics highlights an opportunity to emphasize the value of packaging, influence the narrative, and change the hearts and minds of consumers.

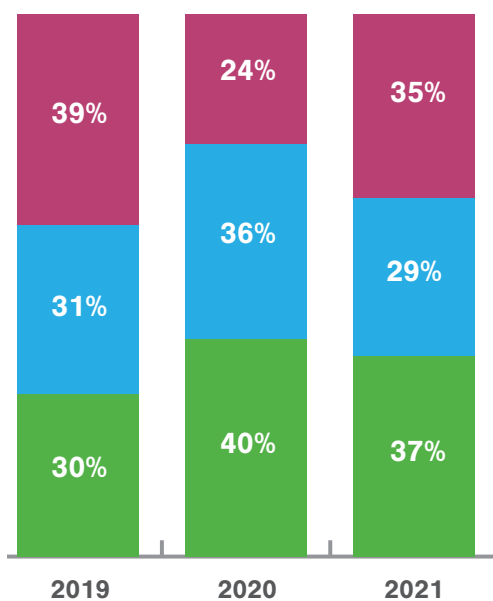
## Perception Evolution

Consumer perceptions about the benefits of plastics also continue to be more positive since the onset of the pandemic. For the past three years, this has been tracked by first asking consumers a simple unaided question: Do the benefits of plastics outweigh the risks?

In 2021, 37% of survey respondents felt the benefits of plastics outweighed the risks when asked unaided. This was up seven percentage points from 2019 after a bigger halo effect in 2020 at the beginning of the pandemic.

### Do You Agree With The Statement: The benefits of plastics outweigh the risks

Agree Neutral Disagree



Consumers' experience with packaging during the COVID-19 pandemic in 2020 positively impacted perceptions.

The 2021 survey also attempted to better understand how the value chain can use messaging to impact perceptions of products and packaging, especially since consumers are bombarded with an overwhelming amount of conflicting information in their day-to-day lives. This was accomplished by presenting survey participants with both a factual statement and a factual but emotional statement prior to again asking if the benefits of plastics outweigh the risks.



Flexible pouches are one lightweight option for many products

Survey participants were next presented with the following statement:

*A recent study showed that due to its light weight, durability and ability to limit food waste, plastic packaging contributes up to four times fewer greenhouse gases than other material alternatives, such as glass or metal.*

(Statement source: Trucost study, 2016)

When again asked if the benefits of plastics outweigh the risks, 54% of participants agreed. This increase of 17 percentage points from the unaided response indicates consumers are receptive to factual statements and feel more positive about these materials when given this information.

Then, participants were shown a more emotional and personal statement:

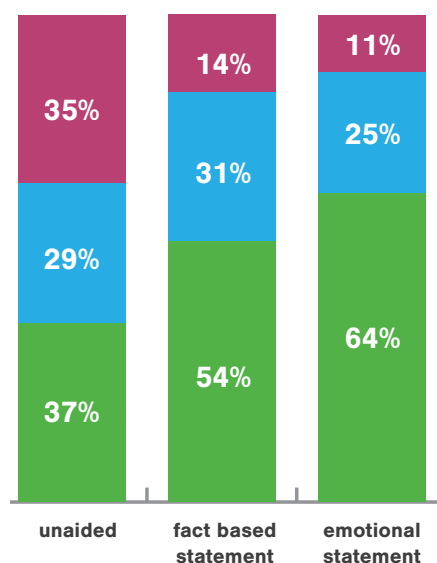
*Plastic packaging is easy to use and recycle and keeps you safe from foodborne illnesses, such as E. Coli and Salmonella, and reduces the impact on climate change versus glass or metal containers.*

(Statement source: US FDA)

The number of participants agreeing that the benefits outweigh the risks jumped to 64%. Equally significant was a 69% decline in people who disagreed.

**2021**

■ Agree ■ Neutral ■ Disagree



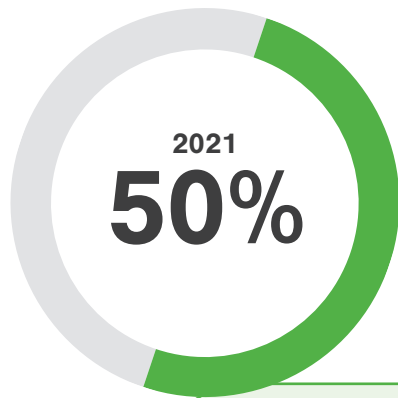
To better communicate the benefits of plastics, brand owners and retailers should consider highlighting wins and the progress toward lighter and more sustainable packaging. Better on-pack information about preventing food waste also should be evaluated.

## Purchasing Power

Many consumers are taking deliberate steps to reduce the amount of plastic packaging they use, and this is influencing their purchasing decisions. Among the 2021 survey respondents, 50% indicated they have taken action. Of these, 81% said they were successful in making purchasing decisions to reduce the amount of plastic packaging.

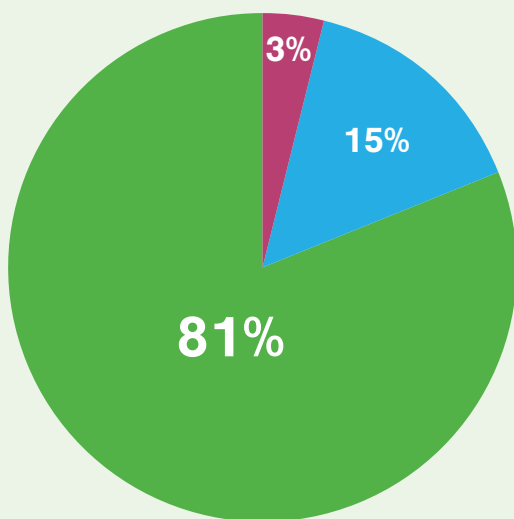
### Taken Steps to Reduce Amount of Plastic Packaging when Making Purchases

(% of total respondents selecting yes)



### Level of Success in Reducing Amount of Plastic Packaging Among Those who Took Steps

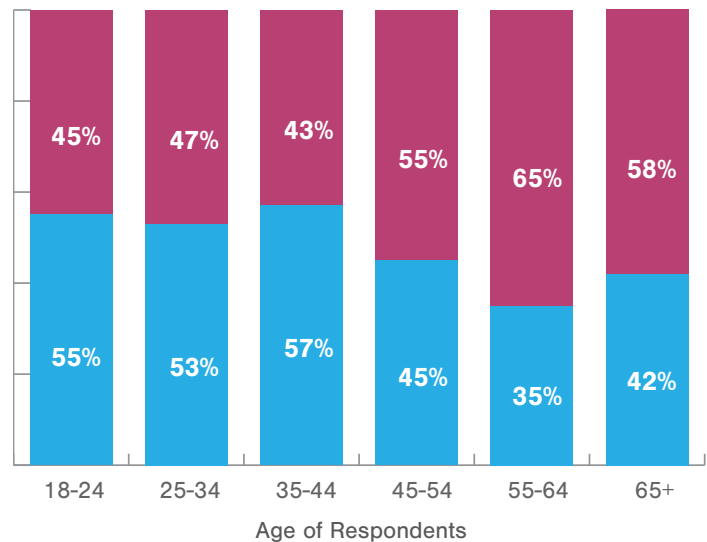
■ Successful ■ Neutral ■ Unsuccessful



Based on the survey, younger consumers, women and those with household incomes greater than \$100,000 are more likely to say they have taken steps to reduce the amount of plastic packaging when making purchases. In particular, consumers under the age of 45 seem to have the highest level of energy around this issue. This is important, as these individuals are the next generation of consumers and decision makers.

### Taken Steps to Reduce Amount of Plastic Packaging when Making Purchases

■ YES ■ NO



When companies historically developed lighter-weight packaging, whether it was from rigid to flexible or flexible to flexible, the decision was often driven by cost savings. Now, with consumers - especially those under 45 - prioritizing sustainability, these packages are a win for both the companies using them and their customers.

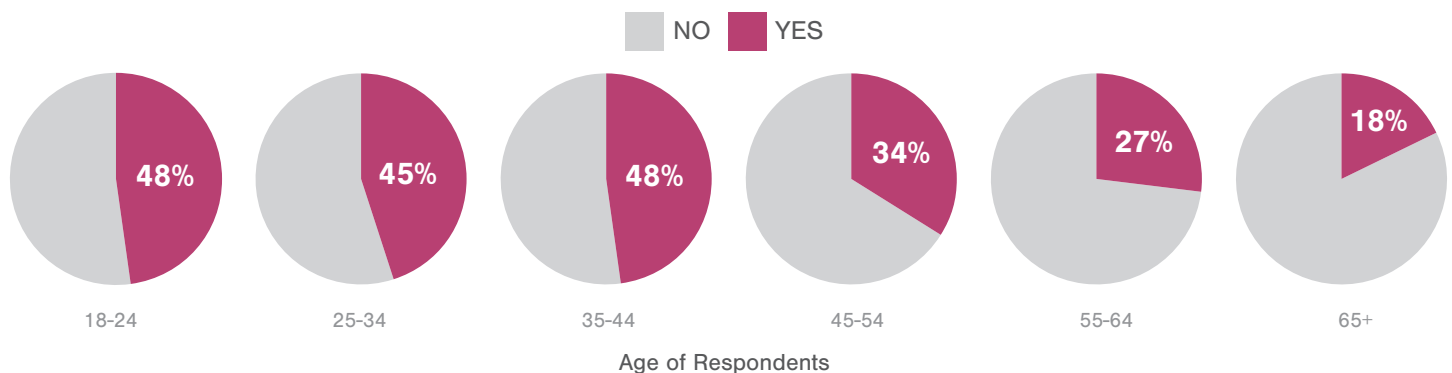
For brands, simple messaging that highlights lighter-weight packaging and the associated reduction of greenhouse gas emissions and climate change impacts could sway the purchasing decision of many consumers.

## Rise of PCR in Packaging

Prior to the onset of the pandemic, 65% of consumers indicated they would prefer a product using packaging with PCR content if there were no price difference. That number slipped to 50% in 2020 as consumers were happy if they could just find the products they needed. In 2021, it rebounded to 56%, showing the renewed value that consumers place on sustainable packaging and a return to the growing focus on circularity and long-term thinking.

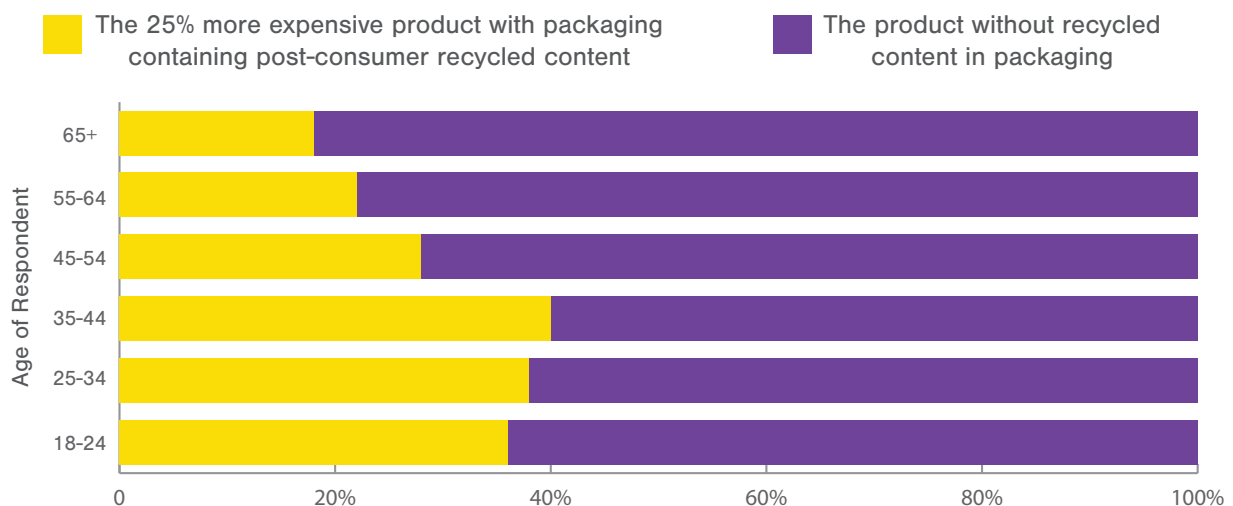
The gap between preferring and actually purchasing a product because the packaging included PCR content has steadily been closing. In 2021, 41% of survey respondents had purchased a product specifically because of the “made from recycled materials” label, with 72% of them saying they purchased a more expensive product. Consumers under age 45 are leading the demand for recycled material.

### Deliberately Purchased Product Because of “Made from Recycled Materials” Packaging Label (2021)



Further delving into these purchasing decisions, however, reveals that price is still king for the majority of consumers. When presented with a decision between packaging without PCR content and packaging with PCR content but at a 25% cost increase, only one in three respondents still say they would choose the product with recycled content in the packaging. Younger consumers were more apt to ignore the price increase, and income level surprisingly had no impact on the decision for all respondents.

### Percent of Consumers Who Would Pay a Premium for Products With Recycled Content Packaging



The research clearly shows an appetite for recycled content packaging with the strongest draw from younger consumers. Brand owners and retailers who offer such packaging now stand to reap significant benefits as first movers, while those who wait are at risk of losing goodwill and customers.



## Wrapping It Up

Over the past three years, consumer perceptions of plastics have shifted. The majority now believe plastic is the most favorable packaging material for safety and sanitation, and they are receptive and responsive to fact- and emotion-based information about the material's value.

The importance of sustainability has not waned and must remain a priority for the packaging industry, especially with more consumers considering PCR-containing packaging in their purchasing decisions.

Although there is still much to do to improve recycling rates and eliminate plastic waste, this insight helps manufacturers, brand owners, retailers and the entire packaging supply chain develop packaging solutions and messaging that meet the needs of specific consumers while advancing the industry toward true circularity.

*These NOVA Chemicals' surveys were conducted in July 2019, August 2020, and April 2021 by GLG. Sample sizes were 1,209 in 2019, 1,280 in 2020 and 1,202 in 2021 with matched demographics.*

**1)** Data source Creative Commons - Hannah Ritchie, Edouard Mathieu, Lucas Rod  s-Guirao, Cameron Appel, Charlie Giattino, Esteban Ortiz-Ospina, Joe Hasell, Bobbie Macdonald, Diana Beltekian and Max Roser (2020) - "Coronavirus Pandemic (COVID-19)". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/coronavirus'

**2)** A Holistic View of the Role of Flexible Packaging in a Sustainable World" by PTIS, for the Flexible Packaging Association (FPA)