

IN COLLABORATION WITH

Futurum



Overview

Recycling plays a critical role in keeping communities clean, safe, and healthy. Properly recycling plastic, aluminum, paper, glass, cardboard, and other recyclables can fuel the continuous reuse of these materials, which in turn can help contribute to the circular economy and help avoid greenhouse gas (GHG) emissions associated with mining of virgin materials. To achieve true circularity, a collaborative recycling effort across consumer households, businesses, policymakers, and local municipalities is needed to potentially grow and improve the ways materials can be kept in the economy for reuse.

There is an opportunity to strengthen the nation's recycling system, one in which consumers understand what can and cannot be recycled, brands adopt recyclable packaging, manufacturers purchase recycled materials for processing into new products, and investments are made to improve recycling education and access to recycling. It's equally important for companies like <u>WM</u>, the largest recycler in North America, to continue making investments to improve recycling infrastructure by adopting technology to collect and efficiently sort post-consumer materials.

Despite the positive impact recycling can have on the environment, there are gaps in the nation's system to be addressed – including confusion about what is recyclable, limited access to recycling in certain areas, and a lack of clarity about what happens to materials after they're placed in recycling bins.

The 2024 WM Recycling Report investigates recycling behaviors and perceptions among consumers and business decision makers across the nation, with the goal to better understand these gaps and potentially strengthen America's recycling system. This report offers insights and opportunities for greater collaboration through bolstering recycling education, accessibility, and investment.





Methodology

The Futurum Group, a research and advisory firm, was commissioned by WM to conduct two online surveys of 1,045 consumers and businesses in July 2024 regarding recycling behaviors and perceptions. The consumer survey included 518 individuals over the age of 18 in the U.S., balanced to reflect U.S. census demographics. The business survey included 527 employees from companies across the U.S., including both recycling program service or contract decision makers within the company, employees responsible for managing recycling programs, and general staff. Throughout this report, 'Americans,' 'consumers,' 'residents,' 'individuals,' and 'households,' refer to consumer survey respondents, and 'business decision makers' and 'businesses' refer to business survey respondents.

Key Learnings

The good news: Many Americans are eager to recycle. Recycling can have both environmental and economic benefits, and the drive for Americans to continue recycling appears to remain strong. Based on the data collected, this report expounds on four primary insights for opportunities to strengthen the nation's recycling system:

- Many Americans want to recycle, but some lack an understanding of how recycling works and the positive impact it
 can have on the environment. The 2024 WM Recycling Report found that many Americans want to recycle more than
 they already do, but some question whether their materials are being recycled at all demonstrating an opportunity for
 stakeholders across the U.S. recycling system to increase transparency on where materials go after they are placed in the
 bin.
- Addressing recycling knowledge gaps is key, as Americans are more inclined to recycle when they have greater awareness.
 Knowledge about what materials can and cannot be recycled continues to draw confusion. Investing in recycling education to address these knowledge gaps may be one of the most impactful strategies to increase recycling participation and confidence in the nation's recycling system.
- Where consumers live can have an outsized impact on their recycling habits. Rural areas face greater accessibility and
 convenience issues that can potentially lead to lower rates of recycling, such as having to drive long distances or visit a
 different site to recycle. To strengthen recycling across the country, it will be important for local municipalities to provide
 more opportunities for their communities to recycle, in collaboration with recycling service providers.
- Creating products with recycled content can be a differentiator for brands and potentially drive consumer purchases. Using recycled and recyclable materials to manufacture consumer and commercial products can provide a valuable point of differentiation for brands and even potentially influence purchasing behaviors. Brands should consider expanded use of recycled and recyclable materials and treat recycling as a natural extension of brand value.



Harnessing Americans' Interest in Recycling

Many Americans want to recycle, but some lack an understanding of how recycling works and the positive impact it can have on the environment.

According to the data collected, households across America appear to have a high desire to recycle, with nearly half (44%) reporting that they are looking for ways to expand their recycling practices in the future. Yet, the report reveals some consumers may lack trust in what materials are being recycled in the U.S. Among individuals who don't recycle, 50% of those ages 18-24 say they don't recycle because they don't believe materials actually get recycled (compared to 18% of respondents overall).

This confidence gap continued when considering specific recyclable materials. For example, plastic is one of the most used materials, and while 86% of Americans who recycle say they will recycle plastic bottles and containers, 1 in 10 are not-at-all confident that their plastics are recycled.

Additionally, among the minority of respondents who don't recycle (roughly 3 in 10 respondents), about 50% of respondents who don't currently recycle say they are not-at-all-confident or not-very confident that plastics placed in recycle bins are recycled.

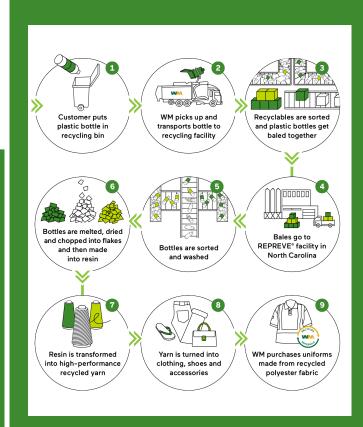
Alternatively, consumers do seem to care about what recycled materials can turn into, supporting the need for greater transparency in the nation's recycling system. Nearly half (45%) of all respondents said they care about what types of materials or products recyclables turn into. This sentiment trended the highest with ages 18-24 at 63%, followed by 5 in 10 saying the same among ages 25 to 44. Most respondents (75%) also said they would be more likely to buy from companies that include recycled content in products.

Key Takeaway:

Stakeholders across the nation's recycling system – including policymakers, municipalities, community organizations, businesses, and recycling service providers – should look for opportunities to strengthen recycling infrastructure across the nation. This can come in the form of investments to bring recycling facilities to new markets, municipalities expanding or adding curbside recycling offerings for residents, and communities and businesses expanding recycling access points in public places.

Case study Turning Bottles Into Apparel

WM supports the circular economy by finding innovative ways to capture and reuse materials. For example, we collaborate with recycled polyester brand, REPREVE®, to transform some of the plastic bottles we recover into clothing, shoes and accessories — including uniforms for WM team members. For over a decade we have worked with REPREVE® to capture more than 20 billion bottles which were transformed into textiles. At the 2024 WM Phoenix Open, we debuted a collaboration with REPREVE® and Peter Millar®.





Addressing Education & Access Gaps

Americans may be more inclined to recycle when they have greater awareness, education, and access.

The data collected shows that confusion about what can and cannot be recycled continues to affect nearly 1 in 2 Americans, with 45% pointing to it as their primary recycling challenge and reason for not recycling more.

The 2024 WM Recycling Report found that more than 3 in 5 (64%) Americans say that knowing more about what to recycle, as well as how, where, and what not to recycle, would increase their recycling involvement. Even among respondents not currently active in recycling efforts, 50% reported that if they knew more about what to recycle and how, their involvement with recycling would increase. More than half also said it was important for their family and friends to be engaged in recycling.

Americans also appear to be taking important steps to recycle properly, with 75% noting they break down cardboard boxes, and more than 5 in 10 saying they screw tops on plastic bottles or clean out recyclable containers such as peanut butter jars, yogurt cups, and pizza boxes. Nearly 3 in 10 never bag recyclables before placing them in the bin, which is an essential part of recycling right.

Not knowing what to recycle can also be dangerous for certain materials. For example, lithium-ion batteries, which are used in many common products including cell phones, children's toys, and laptops, should never be placed in the curbside recycling or waste bin because they can cause fires at waste and recycling facilities.

Alarmingly, the report revealed that fewer than half of Americans (48%) know what products in their household contain lithium-ion batteries. The same proportion of respondents (48%) indicate that they are somewhere between not-at-all and not-very confident that they understand how to recycle lithium-ion batteries properly and safely. Consumers can identify how to dispose of these materials locally from their municipality and/or recycling provider. WM also has a resource on its website to navigate managing these materials.

Key Takeaway:

Recycling awareness nationally and within local communities can create better recycling outcomes, through collaboration among leaders in government, recycling service providers, and community organizations.

Examples of outreach and education include signage and billboard ads, mailers to service area residents, information cards attached to billing statements, opt-in emails and text reminders (especially when a new service goes online or a change is made in the service offering), social channels, and local ad campaigns. Special attention should be given to large volume materials (e.g., plastics) and special-care materials (e.g., lithium-ion batteries) to increase educational understanding and address specific knowledge gaps around recycling.



Case study WM's Collaboration with the National League of Cities

In collaboration with the National League of Cities (NLC), an organization comprised of local leaders focused on improving the quality of life for their constituents, WM is encouraging cities to take meaningful action to strengthen recycling efforts in their communities. Through WM's Recycle Right campaign, WM and NLC are challenging cities to make a public commitment to enhance local recycling efforts and pledge to take action in their communities. More than 120 communities have joined the pledge. Elected officials and staff from municipalities who take the pledge receive resources and tools designed to help them educate their communities about recycling.

NLC Recycle Right Pledge Participant:

"Fort Worth is committed to strengthening recycling in our communities through providing all residents access to recycling bins and investing in education on how to recycle right. Recycling is an essential part of keeping Fort Worth clean and safe and protecting our environment, and we're proud to play our part."

- The Honorable Mattie Parker, Mayor of Fort Worth, Texas





Expanding Recycling Access

Where consumers live can have an outsized impact on their recycling habits.

Convenience is key for recycling growth. The research found that some Americans' recycling efforts are impacted by a lack of access to curbside recycling. It also revealed that when Americans who don't currently recycle are asked why they don't, the majority who are interested find it too hard or inconvenient.

Compared to respondents living in urban and suburban areas, residents in rural areas are least likely to recycle, with only 55% of rural respondents saying they currently recycle – compared to 70% of suburban and 68% of urban respondents who report actively recycling. Rural residents face unique recycling barriers as they are far more likely to be impacted by inconvenience: 50% report having to drive to a different location to recycle, compared to only 33% of urban and 39% of suburban residents.

Additionally, 31% of rural residents surveyed describe their local recycling programs as being either somewhat or extremely lacking, versus 18% of Americans reporting the same overall. Nearly 1 in 3 (29%) respondents living in rural areas report that recycling services are not even offered where they live.

Urban and rural communities differ when it comes to recycling accessibility: While 38% of urban residents report that too-full recycling bins often prevent them from recycling, only 3% of rural residents report facing the same challenge.

Importantly, Americans across geographies indicate that they are committed to recycling. Notably, 22% of the individuals who report that recycling services are not currently offered where they live signal that they have a slightly-to-very-high commitment to recycling. Almost 1 in 10 (9%) individuals who live in areas where recycling services are not offered still manage to recycle. Additionally, 76% of Americans across geographies indicate that they would increase their recycling habits if additional services were made available in their area, and 88% confirm that their commitment to recycling would not be negatively impacted by an increase in the cost of recycling.

Key Takeaway:

Stakeholders across the nation's recycling system – including policymakers, municipalities, community organizations, businesses, and recycling service providers – should look for opportunities to strengthen recycling infrastructure across the nation. This can come in the form of investments to bring recycling facilities to new markets, municipalities expanding or adding curbside recycling offerings for residents, and communities and businesses expanding recycling access points in public places.



Case study WM's sustainability growth investments¹

As the largest recycler in North America, WM has more than 100 recycling facilities and manages more than 15 million tons of post-consumer material per year. As demand for post-consumer recycled materials grows, the company is looking to expand its recycling capacity even further and leverage technology and automation to improve the process. From 2022 through 2026, WM plans to invest more than \$1.4 billion in nearly 40 new and upgraded recycling facilities, which is expected to add 2.8 million incremental tons of capacity annually. Approximately 13 of these facilities will be built in new markets - providing recycling access to communities that previously lacked it.





The Business Case for Recycling

Creating products with recycled content can be a differentiator for brands and potentially drive consumer purchase.

Participation in and alignment with recycling can combine to form a powerful differentiator for brands. WM's study reveals three data points that demonstrate the value of recycling for consumer-facing companies:



of surveyed Americans report that they are more likely to buy products from companies that include recycled materials in their products and packaging.



of surveyed Americans also report being more likely to buy products made with materials that can be recycled.



of surveyed Americans report being more likely to buy products made of recycled materials.

However, as many as 60% of those same respondents report not having clarity on which brands use recycled content in their products, calling for additional education so that consumers have a better understanding.

Additionally, the survey found that commercial recycling continues to increase, which can be critical to making progress toward company sustainability goals and brand building.

The results signal that commercial recycling is on an upward trajectory: Nearly 7 in 10 (69%) U.S. businesses report that their recycling program has either grown or expanded in the last two years. Another 55% indicate that they plan to expand their recycling programs in the future.

This is not all that surprising, given the importance of recycling programs to many organizations' sustainability efforts, goals, and targets. The vast majority of organizations surveyed (87%) confirmed that recycling is at least somewhat important to their sustainability goals, with nearly two-thirds (64%) indicating that recycling is either very or critically important to those goals.

The study also found that half (50%) of organizations surveyed believe it is very important to critically important for their brand to be associated with sustainability and recycling. Along similar lines, nearly 7 in 10 organizations (68%) agree that their company policies governing recycling are at least in part designed to inspire customers to recycle in their personal lives.

Key Takeaway:

Strong end markets for recycled materials are a key part of a successful U.S. recycling system, so businesses have an important role to play by finding ways to use more recycled materials in their products – therefore helping to continue bolstering demand for recycled materials. Doing so can be an opportunity for these businesses to meet sustainability targets, differentiate themselves from their competitors, and build momentum around their sustainable brand journey narrative. Likewise, businesses should work to design their products to be as easily recyclable as possible, for the same reasons.

Companies should also build more visibility for their use of recycled materials and the potential recyclability of their products. After proper verification of recyclability, companies that highlight doing so can potentially help drive sales and customer loyalty and promote the broader public's participation, trust, and understanding of recycling and its importance.

Importantly, federal, state, and local policymakers also have a role to play in generating end-market demand for recycled materials. Legislation such as recycled content minimums – which require companies use a certain amount of recycled content in new products – can help generate commercial demand for recycled materials and complement the goals many companies are making to use more recycled content in their products.





The Path Forward: Considerations for the Future of Recycling

"Recycling is essential to enabling the circular economy, but it works best when we work together. WM's research shows that many Americans are eager to recycle, but they need more education and greater access to recycling in order to build confidence in the practice. As the demand for recycled materials continues to grow, WM is driving solutions alongside our communities and customers by investing in technology that can make recycling more efficient, building new recycling facilities in areas that previously lacked access, and helping consumers and businesses understand what and how to recycle. Together, we can make a difference."

- Tara Hemmer, Chief Sustainability Officer, WM

By investigating common perceptions and behaviors around recycling across the nation, the 2024 WM Recycling Report identified opportunities to address gaps in the nation's recycling system through collaboration to strengthen recycling education, access, and investment.

WM believes recycling plays an essential role in the circular economy. As the company continues to invest in recycling infrastructure with advanced technology, WM expects the amount of materials managed through its investments will continue to increase as it brings more sites online, with a goal of adding 2.8 million incremental tons of annual capacity by the end of 2026. WM aims to recycle more than 25 million tons of material annually by 2030.

Looking ahead, WM plans to continue to invest in strengthening recycling infrastructure, educate communities on how to recycle right, collaborate with producers and brands to help make packaging recyclable, and work across the value chain to drive innovative solutions that will allow more materials to be repurposed.

¹Forward-Looking Statements

Historical data is as of December 31, 2023 unless otherwise stated. This report contains forward-looking statements, including all statements regarding future events, future investments and all outcomes or benefits of such investments. Investments are accurate as of Dec. 31, 2023. Such statements are based on the facts and circumstances as of the date the statements are made and are subject to risks and uncertainties that could cause actual results to be materially different. Please see Part I, Item 1A of the Annual Report on Form 10-K, and subsequent Forms 10-Q, available at investors.wm.com for information regarding such risks and uncertainties. WM assumes no obligation to update any forward-looking statement.





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ABOUT WM

WM is North America's leading provider of comprehensive environmental solutions. Previously known as Waste Management and based in Houston, Texas, WM is driven by commitments to put people first and achieve success with integrity. The company, through its subsidiaries, provides collection, recycling and disposal services to millions of residential, commercial, industrial, medical and municipal customers throughout the U.S., Canada, and Europe. With innovative infrastructure and capabilities in recycling, organics and renewable energy, WM provides environmental solutions to and collaborates with its customers in helping them achieve their sustainability goals. WM has the largest disposal network and collection fleet in North America, is the largest recycler of post-consumer materials and is a leader in beneficial use of landfill gas, with a growing network of renewable natural gas plants and the most landfill gas-to-electricity plants in North America. WM's fleet includes more than 12,000 natural gas trucks - the largest heavy-duty natural gas truck fleet of its kind in North America. To learn more about WM and the company's sustainability progress and solutions, visit https://sustainability. wm.com/"Sustainability.WM.com.

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