The People Behind Our Progress
In our case, putting People First means empowering them to take care of our customers, neighbors and the environment. In our 2021 Sustainability Report, see how WM people are doing their part to support our communities while creating new value from waste. We are always working for a sustainable tomorrow.
About This Report

WM is committed to consistent and meaningful public disclosure and discussion of our progress through the publication of our Sustainability Report.

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core Option, as well as in alignment with the Sustainability Accounting Standards Board (SASB) guidelines for the infrastructure sector and the Task Force on Climate-related Financial Disclosure (TCFD). We publish updates in two formats:

- This annual Sustainability Report, which details progress on our most material issues over the past year, is available as an interactive website and PDF.
- An Environmental, Social and Governance (ESG) Resource Hub that provides detailed information and data related to many aspects of our ESG performance, policies and initiatives. The Hub also houses GRI, SASB and TCFD Indexes, a Data Center and an archive of past reports.

This report generally covers ESG performance for 2020 and early 2021 and, unless otherwise noted, the report boundary is WM’s wholly owned operations, which are in the United States, Canada and India. All data is for the year ended December 31, 2020, except where noted. Notes on the scope of the data, including changes to methodology from the prior reporting period, are included either with charts or in footnotes.

Our 2020 GHG emissions inventory has received limited assurance by Aster Global Environmental Solutions, Inc. We currently do not seek external assurance for other elements of this report.
The Power of People

For all its challenges, 2020 was a pivotal year. During a time of stay-at-home orders and social distancing, the public learned what we at WM have always known: our industry provides an essential service to customers and communities across North America. And it’s our people on the front line—technicians, equipment operators, drivers and route managers—who make it all possible.

WM’s People First culture helped see us through this difficult time. Our culture is continually evolving as we welcome new team members, including 5,000 teammates from Advanced Disposal Services (ADS). As our workforce changes, we’ve set bold goals to increase ethnic and gender diversity at all levels. And because we are invested in our employees’ success, we announced a new, first-of-its-kind education benefit in partnership with Guild Education through which WM will pay 100% of employees’ and their dependents’ tuition for hundreds of degree programs.

Beyond the services they provide our customers every day, our WM family encouraged us to think more broadly about the impact we have on society. Recognizing the increased food insecurity that many communities faced during the pandemic, we organized two employee match campaigns, donating over 3 million meals in total. For Earth Day, WM team members made more than 22,000 pledges to live more sustainably, and in honor of the pledges WM is planting 50,000 trees.

As wildfires, hurricanes, extreme temperatures and power outages consumed North America over the past year, we’ve been reminded of the importance of preserving our shared climate. The services that WM provides, including recycling and renewable energy, already avoid far more greenhouse gas emissions than we generate, but we’re working to do even more to decarbonize our operations and help customers embrace new models of resource transformation and reuse.

Post-pandemic, we are embracing opportunities to establish a new normal that is better than the one we had before, and that includes strengthening our focus on all aspects of sustainability. To that end, we’re pleased to have named our company’s first Chief Sustainability Officer, Tara Hemmer, who has been with WM for more than 20 years. You can read a message from Tara on p. 4. Throughout our 2021 Sustainability Report, you’ll read the stories of other inspiring WM team members who are working to bring about a brighter future. We hope this report gives you a better appreciation for the people behind our progress—and how WM supports them in all that we do.
Always Working for a Sustainable Tomorrow

I’m pleased to be addressing you for the first time as WM’s first Chief Sustainability Officer (CSO) and to present our 2021 Sustainability Report.

As part of WM’s executive leadership team for the past several years, and as a WM employee responsible for leading and implementing environmental programs for much longer, I am deeply committed to WM’s sustainability journey.

In a year of change and challenge, WM invested in its environmental services, including building new recycling facilities, increasing production and use of renewable natural gas and developing new technologies that provide alternatives to landfill disposal. We also completed a deep dive into our Inclusion, Equity & Diversity efforts, strengthened our Commitments & Values through targeted outreach and increased our focus on environmental justice.

Expectations of businesses like WM will only increase as the sustainability landscape continues to evolve. In my role as CSO, I look forward to growing the sustainability-focused services that WM provides while reducing our own carbon emissions, helping our customers meet their sustainability goals and unlocking new solutions that will help our company and communities throughout North America thrive. We’ll continue to share our successes—and inspire others to follow—at the annual WM Sustainability Forum.

As a parent, I am acutely aware of the importance of leaving the world a better place for future generations. WM’s investments in sustainability are the most important ones we can make, and there’s no time like today to start shaping a sustainable tomorrow.

Tara Hemmer
Chief Sustainability Officer
The past year has been one of extraordinary challenge and change—but also one filled with opportunity and achievement.

**Convened** an Inclusion, Equity & Diversity leadership council that includes representation from our frontline and field operations, led by senior leadership.

**Brought** online our new renewable natural gas facility at our Skyline Landfill in Ferris, Texas.

**Invested** over $100 million in new technology for our materials recovery facilities (MRFs) across the U.S.

**Completed** the acquisition of Advanced Disposal Services (ADS), welcoming new team members to the WM team.

**Introduced** Your Tomorrow, a new education benefit through which WM will pay 100% of employees’ and dependents’ tuition for a range of degree programs.

**Successfully** served customers and guaranteed pay for 40 hours per week of work for all full-time hourly employees, regardless of COVID-19-related service decreases.

**Reduced** fleet emissions by 46% against a 2010 baseline by fueling much of our fleet with renewable natural gas.

**Organized** a Million Meals campaign and a Can If You Can food drive and fundraiser that, combined, provided more than 3 million meals for people experiencing food insecurity.

**Embraced** Customer Service Digitalization, which makes interactions with customers more transparent and efficient.

**Worked** with National Forest Foundation and Tree Canada to plant 50,000 carbon-sequestering trees in public lands to represent team members’ commitment to live sustainably.

**Announced** the debut of team member uniforms made of Unifi’s REPREVE fiber woven with recycled plastic.

**Improved** our ESG disclosures, as recognized by third-party rating organizations, and engaged in global dialogue on climate change.

**Committed** to setting a Science-Based Target initiative (SBTi) emissions reduction goal in 2022.

**Hosted** our 2020 Sustainability Forum and the Driving Sustainability Series and announced our upcoming series, Together Today, For Tomorrow (TT4T).

**Moved** into our new corporate headquarters in Houston, which is the first LEED v4 Platinum Core and Shell-certified project in the United States.
Waste Management, Inc. or WM (NYSE: WM), based in Houston, Texas, is the leading provider of comprehensive environmental services in North America. COVID-19 began to impact our business in March 2020, affecting most geographies and a variety of our customer types throughout the rest of the year. On October 30, 2020, we completed our acquisition of Advanced Disposal Services (ADS). The results of these impacts are reflected in our 2020 data. Our services and solutions allow us to create the following benefits for shareholders and communities:

<table>
<thead>
<tr>
<th>People</th>
<th>Landfills and Transfer Facilities</th>
<th>Community Vitality</th>
<th>Financial</th>
<th>Environmental Conservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>48,250 team members</td>
<td>348 transfer facilities 263 active solid waste landfills 5 active hazardous waste landfills</td>
<td>$14.2M in charitable giving $1.2M in-kind services donated</td>
<td>$15.2B total revenue $3.4B cash from operations</td>
<td>75 certified wildlife habitat programs 63 pollinator programs 185 active habitat, species and education certified projects</td>
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<tr>
<td>Recycling Facilities</td>
<td></td>
<td></td>
<td></td>
<td>14,709 acres actively managed for wildlife preservation</td>
</tr>
<tr>
<td>52 single-stream recycling facilities</td>
<td>30 commercial facilities</td>
<td>860 community events hosted and/or participated in by WM</td>
<td>$1.6B capital expenditures $1.3B returned to shareholders</td>
<td></td>
</tr>
<tr>
<td>12 bale/transfer/buy-back/dedicated customer processing facilities</td>
<td>38 organics composting/mulch/wood waste facilities</td>
<td>4 CORe® organics processing facilities</td>
<td>9 construction and demolition recycling facilities</td>
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</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td>57,565 people, including K-12 youth and college students, participated in WM-hosted education and community betterment activities, while following COVID-19 safety protocols</td>
</tr>
<tr>
<td>57,565 people, including K-12 youth and college students, participated in WM-hosted education and community betterment activities, while following COVID-19 safety protocols</td>
<td>10,388 alternative fuel vehicles 104 landfill gas-to-electricity facilities</td>
<td>171 natural gas fueling stations with 25 public stations</td>
<td>16 landfill gas-to-natural-gas facilities</td>
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<tr>
<td>16 landfill gas-to-industrial customers as a direct substitute for fossil fuels</td>
<td>26 landfill gas-to-industrial customers as a direct substitute for fossil fuels</td>
<td>14,709 acres actively managed for wildlife preservation</td>
<td>185 active habitat, species and education certified projects</td>
<td></td>
</tr>
</tbody>
</table>

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1 Waste Management, Inc. is a holding company, and all operations are conducted by its subsidiaries. References to “Waste Management,” “the Company” or “WM” refer to Waste Management, Inc. and its consolidated subsidiaries, unless context provides otherwise.

2 The number of people we were able to reach through community events and educational activities was lower in 2020 than in years past due to COVID-19.
## Awards

We’re proud to have been recognized for our efforts to create a rewarding workplace while operating a sustainable business. Additional awards, including past awards, are listed in our [ESG Resource Hub](https://www.sustainability.wm.com).

| Fortune 2021 World’s Most Admired Companies |
| Barron’s 100 Most Sustainable Companies |

### Member of Dow Jones Sustainability Indices

*Powered by the S&P Global CSA*

*Sector Leader, and Sustainability Yearbook Award*

S&P Global ESG

| America’s Most Responsible Companies Newsweek 2021 |
| 3BL Media 100 Best Corporate Citizens 2021 |

| WILDLIFE HABITAT COUNCIL |
| Corporate Conservation Leadership Award |

| 2021 WORLD’S MOST ETHICAL COMPANIES |
| 2021 Silver Level ecovadis Sustainability Rating |

| CDP A LIST 2020 CLIMATE |
| FTSE4Good |

## Responding to the Pandemic

COVID-19 touched every aspect of our business, from our team members and operating procedures to our customers and communities. As an essential service, WM continued to operate as much of the world paused, adapting as needed to new work environments, and maintains a crossfunctional taskforce that meets regularly to monitor and recommend changes to WM’s COVID protocols. This report covers a few of the many ways we responded:

- Continued to operate our waste and recycling collection services with limited interruption, supplying an essential feedstock for manufacturing industries that rely on recycled material.
- Used technology, such as our Connected Landfills solution, to remotely monitor equipment during stay-at-home orders.
- Updated our business continuity plan for our operations, implementing new safety procedures in our facilities and vehicles.
- Put [People First](https://www.sustainability.wm.com) with a guaranteed pay for 40 hours of work for all full-time hourly employees, regardless of COVID-19-related service decreases.
- Expanded use of [WM Now](https://www.sustainability.wm.com), our internal mobile app, to deliver consistent communication regardless of role or work environment.
- Offered virtual environmental education programs across the U.S. and donated millions of meals to [help address hunger](https://www.sustainability.wm.com) in our communities.
Goals & Progress

Environmental Goals

Our overarching sustainability goal is to reduce GHG emissions.

Currently, the services we provide avoid three times (3X) more GHG emissions than we generate in our operations. Our 2038 goal calls for avoiding even more—four times (4X) our operating emissions. To achieve this goal, we aim to reduce emissions from our landfills, fleet and electricity use, while increasing the emissions-avoidance services that we provide to our customers. The chart below illustrates our progress to date and our projection for 2038. The bar above the zero line will decrease as we reduce operational emissions. At the same time, the bar below the zero line will increase.

In 2020, WM avoided 3.23 times more CO₂e emissions through the services that we provide than we generate in our operations, a 3.3% reduction from 2019. There are several reasons for this:

- WM collected fewer tons of waste in 2020, yet we collected more landfill gas at our sites than in 2019. However, the methodology used in the U.S. to model landfill emissions, combined with the additional emissions from the ADS acquisition, resulted in WM reporting more emissions. Emissions from ADS landfills make up 30% of the increase, with the remaining increase attributed to the landfill modeling methodology used by the industry for reporting. This increased the denominator used to calculate our 4X goal. We continue to focus our efforts on measurement and operational management practices to reduce overall emissions, investing in these areas while also working to develop accurate measurement systems for landfill emissions.

- In 2020, COVID-19 also impacted our recycling volumes with the closure of commercial businesses. This particularly impacted the amount of paper and wood we recycled and lowered our avoided emissions used in the numerator of our 4X goal. We are committed to investing to grow our recycling presence.
In 2019, WM committed to a new set of shorter-term goals for 2025.

By 2025, we aim to have a fleet made up of 70% alternative fuel vehicles, of which 50% are fueled with renewable natural gas. Using renewable natural gas collected from our landfills has helped us achieve this goal ahead of schedule.

We have also set a goal to use 100% renewable energy at facilities we control. WM is working with our vendors to put new contracts in place to ensure we are purchasing 100% renewable electricity by 2025. We are on track to achieve or exceed these goals.

Another important short-term goal is reducing inbound recycling contamination at our MRFs. Reducing contamination will make our MRFs more efficient, allowing us to recycle more. This, in turn, will allow more materials to be recycled into new products, avoiding the emissions associated with mining virgin materials.

Finally, WM has a goal to develop measurement processes for fugitive emissions released from our landfills by 2025.
**Introduction**

**People Goals**

As a People First company, WM is always setting a higher standard for the positive impact we can make on our people and their communities.

**Providing a Living Wage**
In 2019, we set a goal to pay a living wage to all employees, which we have achieved ahead of our 2025 commitment. For details on how WM calculates a living wage, see our GRI Index, Disclosure 202-1.

**Increasing Diversity**
At the 2021 Sustainability Forum, CEO Jim Fish announced two new goals for diverse representation in our workforce. By 2025, we aspire to achieve ethic and racial diversity in each segment of our workforce, with an emphasis on leadership, that is greater than or equal to the estimated availability of minority talent in the marketplace. Also by 2025, we aspire to lead the industry in female representation at all levels.

**Engaging with Communities**
WM also aims to enhance the safety, resiliency and sustainability of the communities where we live and work. We do this by providing them with our essential services in a way that safeguards human health and the environment, and through education focused on the importance of living sustainably and taking care of the natural places in our neighborhoods. We organize environmental education programs and activities, including facility tours, community events and social media engagement campaigns, with a goal of reaching 1 million participants by 2038. In 2020, due to the pandemic, we reached fewer people than we would have otherwise, but shifted to offer many activities virtually.

**Inclusion & Diversity**

**Ethnic Diversity**

**Female Representation**

**Participants in WM-Supported/Hosted Education Events and Programs (cumulative)**

Goal 1M
Leadership in Sustainability

We’re always working for a sustainable tomorrow, which includes managing our customers’ waste responsibly while also providing sustainable services to reduce their carbon footprint.

Our success depends on the actions of many stakeholders, and the policies that shape action at the city, state and federal levels. It is important for us to take bold action. That is why WM has committed to investments in renewable energy and recycling, and is focused on growth in its sustainable solutions. Sharing best practices and promoting the value of recycling and renewable energy are key areas of focus and are integral to what we do.

Throughout the year, WM leaders and experts share their perspectives on critical issues with policymakers, industry peers and the general public. Here are a few of the many ways we drive conversations around sustainability:

### Working with Governments

An important part of our business is engaging with municipalities to advance the health and safety of our communities. Since the America Recycles Day Summit in 2019, WM has urged an increased use of post-consumer content and packaging by government agencies and large corporations. We have participated in multiple working groups to examine topics such as infrastructure and markets, education and measuring recycled materials. WM also submitted comments to U.S. EPA’s 2020 and 2021 requests for input on their recycling strategy, and definitions and measurement boundaries proposed by the agency in early 2021.

### Communicating Through Media

WM has a point of view on what it means to recycle right—but we know many people still have questions. Our leaders regularly appear in news segments or provide quotes for articles, offering their opinions on recycling best practices and industry trends. In the past year, WM spoke with many national and local news outlets, including the Wall Street Journal, ABC News and TODAY, about recycling, business leadership, protecting and empowering the workforce, navigating the safety and financial health of the business during COVID-19 and the path to a more sustainable future.

### Leading by Example

In 2021, CEO Jim Fish named Tara Hemmer our Chief Sustainability Officer, making her the first in our industry to hold this title. We have also made an industry-first commitment to developing technologies for measuring landfill emissions, and we are increasing our use of post-consumer content in our recycling carts.

While the topic of environmental justice has had increased attention over the last year, it is by no means a new concern for WM. Over the past several decades, we have worked closely with the U.S. EPA and other stakeholders in developing EJ tools, including the EJSCREEN tool. WM is the only company in our industry to publish information about our sites using this tool, and we are developing a formal program to address environmental justice issues at our facilities.

### Engaging with Our Industry

Over the past year, WM has taken on a leading role in communicating broad sustainability issues across our industry. For example, Tara Hemmer spoke at Waste 360’s Global Waste Management Symposium about our industry’s role in mitigating climate change and Susan Robinson, Senior Director of Sustainability, also kicked off Waste 360’s Sustainability Talks Summit at Waste Expo. Susan also writes a monthly column that goes beyond topics of waste and recycling, challenging readers to consider the impacts businesses and individuals can have on ESG issues.

### Fostering Transformative Solutions

At the annual WM Sustainability Forum and WM Phoenix Open, we engage others in dialogue around protecting the planet and driving change. The Forum brings together stakeholders across industries and sectors for a dynamic knowledge-sharing event.

Learn more about the 2021 Forum, as well as the WM Phoenix Open, on the pages that follow.
Highlights from the 2021 WM Sustainability Forum

At the 2021 WM Sustainability Forum, the first all-virtual event in our 11-year history, we focused on the theme of “Breakthrough.” After a year of crisis, thought-provoking speakers called for a new equilibrium among political, economic, social and environmental systems in order to create a more sustainable world.

Our opening panel discussion, moderated by Joel Makower, Chairman and Executive Editor, GreenBiz Group Inc., focused on what cities, NGOs and corporations can do to reduce GHG emissions. Panelists included Jonathan Foley, Executive Director, Project Drawdown; Cooper Martin, Director Sustainability & Solutions, Center for City Solutions at the National League of Cities; David Tulauskas, Vice President, Chief Sustainability Officer, Nestlé Waters; Rachel Goldstein, Global Sustainability Director for Scientific and Regulatory Affairs, Mars, Inc.; Susan Robinson, Sr. Director of Sustainability and Policy, WM; and Tim Juliani, Director of US Corporate Climate Engagement, World Wildlife Fund.

Hope
Far from being hopeless, addressing climate change is actually one of the biggest opportunities we have to rebuild the future, to build a better future, to build a future we want.”

Jonathan Foley
Executive Director of Project Drawdown

Before joining a panel about how cities, corporations and NGOs can reduce GHGs, Foley gave a presentation on the concept of “drawdown.”

Innovation
Our drivers will ride their routes collecting plastic bottles, milk jugs and other materials that will eventually be turned into the uniforms that they wear every day. This is the circular economy in action.”

Jim Fish
WM President and CEO

WM CEO Jim Fish gave the opening keynote on how we are charting a more sustainable tomorrow.

Creativity
I came to love the earth as a playground and also a point of inspiration. And I decided to apply all of that to fashion. I want to make good design affordable, sustainable and optimistic.”

Charles Harbison
Fashion Designer

Harbison, who recently launched a sustainable clothing line with Banana Republic, spoke about what inspires him to design with sustainability in mind.

Purpose
Purpose-driven companies—companies with a soul and a character—are going to attract more of the best and the brightest talent.”

Indra Nooyi
Former Chairman and CEO, PepsiCo

Nooyi took part in a conversation about how companies can thrive in a purpose-driven world.
The pandemic really lifted a veil from many people’s eyes and showed just how quickly we can fall into a state of poverty and hunger. People stepped up to help, and I’m very optimistic that will continue.”

Jasmine Crowe, CEO of Goodr

Supporting the Next Generation of Innovators

In collaboration with Slow Factory, a nonprofit operating education, design and community initiatives in the fashion sector, WM announced a design challenge that will support emerging designers in applying circular and regenerative principles to their work. Through the WM Design Challenge, Powered by Slow Factory, six individuals/teams will create design solutions for products, materials and/or systems that embrace regenerative practices. Participants will receive grants to develop their ideas and will be mentored by leaders in the textile recycling supply chain. The program will culminate in a showcase of lessons learned at the 2022 WM Sustainability Forum.
## UN Sustainable Development Goals

WM has aligned our goals to the United Nations Sustainable Development Goals (SDGs). In 2020, WM adopted a targeted approach to the UN SDGs, identifying goals and specific targets where we could have the greatest impact. Our 2025 and 2038 goals align with eight of the SDGs, and over the past year we have made a positive contribution to the SDGs in a number of ways:

<table>
<thead>
<tr>
<th>GOAL</th>
<th>PROGRESS</th>
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<tbody>
<tr>
<td><strong>03 - Good Health and Well-being</strong></td>
<td>• Honored employees for safe and effective work through the <a href="#">WM Driver, Operator and Technician of the Year Program</a>.</td>
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<tr>
<td></td>
<td>• Used video event recorders to alert drivers to unsafe behavior.</td>
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<td></td>
<td>• Kept our people safe throughout the pandemic.</td>
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<tr>
<td><strong>07 - Affordable and Clean Energy</strong></td>
<td>• Continued to use <a href="#">landfill gas</a> to create renewable electricity and renewable fuel, some of which is used in WM’s fleet.</td>
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<tr>
<td></td>
<td>• Supported three ultra-low-carbon-intensity dairy projects, where methane gas is captured from dairy operations to <a href="#">fuel our fleet</a>.</td>
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<td></td>
<td>• Piloting zero emissions <a href="#">electric truck</a> at multiple sites to facilitate commercialization of this technology.</td>
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<tr>
<td></td>
<td>• Hosted 100 MW of wind power and 53.9 MW of <a href="#">solar capacity at our closed landfills</a>.</td>
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<tr>
<td><strong>08 - Decent Work and Economic Growth</strong></td>
<td>• Launched <a href="#">WM Now</a>, an employee mobile app through which people can access employee benefits, safety updates, company news and more.</td>
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<tr>
<td></td>
<td>• Provided <a href="#">employment opportunities</a> to overlooked and underserved community populations.</td>
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<tr>
<td></td>
<td>• Committed to paying all employees a <a href="#">living wage</a> and guaranteed pay for 40 hours of work for all full-time hourly employees, regardless of COVID-19-related service decreases.</td>
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<tr>
<td></td>
<td>• Invested in new recycling infrastructure.</td>
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<tr>
<td><strong>09 - Industry, Innovation and Infrastructure</strong></td>
<td>• Continued to convert our <a href="#">fleet</a> to run on CNG and increased our investments in dairy biogas.</td>
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<tr>
<td></td>
<td>• Used technologies like <a href="#">Smart Truck</a> to decrease recycling contamination, allowing us to recycle more effectively.</td>
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<tr>
<td></td>
<td>• Our <a href="#">unprecedented investment in infrastructure</a> supports economic development in a changing market and protects employees with increased safety measures such as fire suppression.</td>
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<tr>
<td><strong>10 - Reduced Inequalities</strong></td>
<td>• Made strides to hire female employees and team members from <a href="#">diverse backgrounds</a>, with an emphasis on hiring them into leadership roles.</td>
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<tr>
<td></td>
<td>• Pledged to provide a <a href="#">living wage</a> to all employees which we have achieved ahead of our 2025 commitment.</td>
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<td></td>
<td>• “Power of One” initiative is designed to enable all employees to commit to doing one thing to be part of the solution and improve IE&amp;D at WM.</td>
</tr>
<tr>
<td><strong>11 - Sustainable Cities and Communities</strong></td>
<td>• Worked with CPG companies to encourage design for recycling and recycled content.</td>
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<tr>
<td></td>
<td>• Invested over $100 million per year in our <a href="#">recycling infrastructure</a>, resulting in the construction of five new MRFs and upgraded equipment at 26 facilities, boosting efficiency.</td>
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<td></td>
<td>• We have 171 natural gas fueling stations with 25 public stations that improve access of <a href="#">sustainable fuel for public transportation</a>.</td>
</tr>
<tr>
<td><strong>12 - Responsible Consumption and Production</strong></td>
<td>• Hosted hundreds of in-person and virtual <a href="#">events</a> about recycling and environmental protection.</td>
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<td>• Donated <a href="#">more than 3 million</a> meals to people in need.</td>
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<td></td>
<td>• Maintained a suite of programs designed for safe disposal of <a href="#">hard-to-handle materials</a>.</td>
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<tr>
<td><strong>13 - Climate Action</strong></td>
<td>• Recognized the risks <a href="#">climate change</a> poses to our business, as severe weather has the potential to disrupt service and damage our facilities and fleet.</td>
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<td></td>
<td>• Partnered with a half-dozen organizations, including NASA, to measure and better manage fugitive emissions released from landfills.</td>
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<td></td>
<td>• Prepared for <a href="#">natural disasters</a> so we can better respond and support our customers when they occur.</td>
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</table>

Learn more about our progress toward specific SDG targets in our ESG Resource Hub.
The content of this report has been compiled and organized upon insights from a materiality assessment conducted by an internal team. In 2019, we performed a reassessment of issues, risks and opportunities that are material to our sustainability strategy. This helped us identify topics that are strategically important to our company and stakeholders while guiding decision-making across our value chain.

- Environment
- Social
- Governance

To learn more about WM's approach to reporting and materiality assessment process, visit the ESG Resource Hub.

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**Key Material Issues**

**External Stakeholders**

- Health & Safety
- Leadership Accountability
- Recycling Reporting

**Internal Stakeholders**

- Health & Safety
- Business Ethics
- Leadership Accountability

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1 Our discussion of materiality, and material topics or issues, in this report is not an indication that such information is necessarily material to our company’s investors in general pursuant to SEC disclosure requirements.
People First

In This Chapter:

- Overview
- Inclusion, Equity & Diversity
- Talent Engagement & Retention
- Welcoming ADS to the WM Team
- Training & Development
- Safety
Xavier Watson's passion for resource conservation began when he was a child growing up in Jamaica. Living on the island, Watson learned the importance of reusing daily items and limiting waste.

Watson and his family eventually immigrated to the United States, and after Watson finished high school, he joined the U.S. Navy. His travels with the Navy took him to other parts of the world, where he learned how other countries and cultures view resource conservation. These experiences sparked a passion Watson felt he could pursue as a career.

“When I thought about what I wanted to do for a living, I knew the opportunity to work in the recycling industry would be a good fit,” Watson reflected. “There was nothing to do but to jump right in.” After leaving the military in 2006, Watson joined WM’s MRF Operations team in Orlando, Florida.

Watson worked his way up through the organization and various positions, excelling in leadership roles. He also focused on continuing his education and earned his college degree in business management.

Fifteen years later, Watson is now the MRF Manager at the WM Recycling Brevard County MRF. Every day, he proudly leads his team, knowing that what they do makes a difference for the environment.
Overview

Whether managing routes, working in our facilities or communicating with customers, WM employees play a vital role in the communities we serve.

Knowing that our success depends on the success of each employee, we are a company committed to People First. We strive to give our people the tools they need to develop and excel in their careers.

Our workforce includes three major categories of employees:

- **Frontline employees** including collection vehicle drivers, technicians and mechanics, and operators of equipment at our landfills, transfer stations and material recovery facilities.
- **Operations employees** including route managers, fleet managers, district managers and facility and design engineers.
- **Corporate professionals** including customer experience, sales, finance and accounting, legal and compliance, policy, digital and our people organization.

Thriving in an Evolving Industry

In 2020, we were able to maintain a strong workplace for employees by addressing these challenges:

- A competitive labor environment
- High levels of turnover due to high demand and challenging work.
- Ongoing cultural integration of more than 100 acquisitions over the past five years.
- The need to retain knowledge and develop skills among a five generation workforce.
- An imperative to keep employees safe as waste streams and industry dynamics change.
- A desire to become more inclusive, equitable and diverse at all levels of our company.

Living Our Commitments & Values

We are committed to strengthen our position as an employer of choice in an increasingly complex environment. In 2019 we formed a Culture & Engagement department to address these challenges and help reduce the wide variance in employees’ cultural experiences. The department includes a Culture Council made up of a cross-section of leaders as well as over 500 Ambassadors who help educate fellow employees on WM’s Commitments & Values.

We continuously socialize our Commitments & Values through site-based programs and resources in English, Spanish and French. Throughout 2020 and early 2021, we planned distinct programming on both of our Commitments and all four of our Values. Ambassadors organized “huddles” where they brought the Commitment or Value to life, introduced its executive sponsor and provided a call to action for team members. For example, during the Inclusion, Equity & Diversity huddle, ambassadors introduced our Power of One program, while 50,000 trees were planted to represent employee pledges to live sustainably. Senior leaders also shared resources and messaging with vice presidents to help them present the Commitments & Values to their teams.

Our Commitments & Values framework enabled WM to respond thoughtfully to the events of 2020, including the pandemic and calls to action regarding social injustice. Looking ahead, we believe WM’s Commitments & Values will support our focus on innovation and inclusivity, allowing us to forge a future that will benefit all of our employees.
In the simplest terms, our Values come down to this: “Do the Right Thing. The Right Way.” This idea sets the standard for our fundamental Commitments and core Values, guiding our daily actions and decisions.

**Commitments**

- **People First:** The proud, caring and resilient members of the WM family are the foundation of our success. We commit to taking care of each other, our customers, our communities and the environment.

- **Success With Integrity:** Our success is based not only on the results we achieve, but on how we achieve them. We are committed to being accountable, honest, trustworthy, ethical and compliant in all we do.

**Values**

- **Inclusion, Equity & Diversity:** We embrace and cultivate respect, trust, open communication and diversity of thought and people.

- **Customers:** We place our customers at the center of what we do and aspire to delight them every day.

- **Safety:** We have zero tolerance for unsafe actions and conditions, making safety a core value.

- **Environment:** We are responsible stewards of the environment and champions for sustainability.

Inclusion, Equity & Diversity (IE&D) are fundamental values, as described in our [Code of Conduct](#). WM continues to assess our goals to make improvements in future years.

**Embedding IE&D Across WM**

In 2020 we launched our IE&D leadership council, sponsored by members of WM’s senior leadership team. The council works to evaluate policies, practices and procedures, and offers recommendations in the areas of education, training, talent development, recruitment and partnerships to ensure that our IE&D efforts are sustainable and are tied to the business strategy.

Since its creation, the group has developed a framework and structure for rolling out business impact groups and company-wide IE&D training. Enterprise results are reported to the senior leadership team quarterly, and our Board of Directors receives an annual report on IE&D strategy and progress.

**Raising Our Ambitions**

To further embed IE&D as a central pillar and continued cultural focus, we added two aspirational goals to achieve by 2025:

- Achieve ethnic and racial diversity in each segment of our workforce, with an emphasis on leadership, that is greater than or equal to the estimated availability of minority talent in the marketplace.

- Lead the industry in female representation at all levels, with a special emphasis on frontline and women in leadership.

In 2020 we identified policies, practices and procedures that could enhance our ability to meet these goals; incorporated IE&D metrics into each market’s monthly and quarterly business reviews; and launched internal and external campaigns to highlight employees from underrepresented groups in an effort to inspire existing and future employees. In addition to these goals, we are growing our focus on recruiting employees who identify as LGBTQ, as veterans or as having a disability.

WM is committed to a diverse Board of Directors. This is evidenced by the fact that one-third of our Board members are women, and 22% self-identify as ethnic minorities.

It’s essential that our workforce, from the frontline to executive leadership, reflect the diverse customers and neighbors who make up our communities.
Growing Awareness of IE&D

WM’s efforts to create a more diverse and inclusive workforce represent a long-term commitment. As the U.S. grapples with long-standing issues related to racial injustice, inequality and fairness, we have also been confronting these hard realities.

For example, we launched the Power of One, a movement focused on the impact one person can have, designed to enable all employees to commit to doing one thing to be part of the solution and improve IE&D at WM. Employees have pledged to educate themselves on IE&D issues, share what they learn with family members, and mentor and guide diverse emerging leaders. With nearly 50,000 employees, we believe that many small actions can add up to powerful change.

Another way we are continuing the dialogue is through a Courageous Conversation series. During these webinar-style events, employees across the enterprise come together to discuss topics such as Latino identity and tips for women seeking careers in trucking and transportation. We also shared a candid conversation between WM leaders about how we must move forward as a company to address racial injustice and held a town hall session where employees could pose questions to leadership about WM’s IE&D efforts.

Increasing the Number of Women in Our Ranks

While the waste industry has traditionally been male dominated, we are making significant strides to increase the representation of women. The percentage of women in professional, executive and Board positions at WM currently approaches or exceeds industry averages, and we aspire to lead the industry in female representation at every level.

To further address gender diversity challenges in frontline positions, we’re taking steps to actively recruit, hire and develop women. For example, we are a Gold Member of the Women in Trucking (WIT) Association, which works to encourage employment, promote accomplishments and minimize obstacles faced by women in the trucking industry. WM serves on WIT’s board and works closely with the organization and other trucking industry participants to address recruitment efforts.

Supporting Diverse Suppliers

WM promotes supplier diversity, with a goal of achieving 10% growth in annual spend with diverse suppliers through 2038. Our Board of Directors receives an annual report on our spend with diverse suppliers, directly overseeing our progress toward this goal. In 2020, we hosted Share the Mic and the Money Now, an event designed to amplify the voices of Black women executives and to connect Black women entrepreneurs from the Houston area with major corporations in hopes of creating diverse supplier relationships.

Diverse Supplier Spend
($ in millions)

Progress toward this goal was impacted by the pandemic, which led to closures of some of our supplier businesses. In addition, one of our larger diverse suppliers was acquired by a non-diverse-owned company.

In 2020, our addressable spend went down, which actually increased our percent of diverse supplier spend. Diverse supplier spend was 5.3% of addressable spend in 2020, up from 5.2% in 2019. Visit our ESG Resource Hub for more information about WM’s supply chain.
**Supporting Veterans**

The recruitment of veterans is another ongoing focus, especially because the military offers a substantial pool of potential professionals with expertise in transportation, logistics and maintenance—all areas well-aligned with our needs.

We take a systematic approach to recruiting veterans, posting all open positions on military and veteran network sites that specialize in promoting placement of veterans with private-sector employers, as well as government-owned job placement sites. We also engage in strategic partnerships and marketing efforts with the Department of Labor Career One-Stop centers, Hire Purpose, Corporate Gray, U.S. Veterans Magazines and job fairs. Today, we have almost 2,500 veterans working in a variety of roles at WM, representing 6% of our workforce.

To help retain the servicemembers on our teams, we offer a military leave policy and donate to military causes in the U.S. and Canada. As a result of these and other policies, WM was named to Military Times’ 2020 list and Victory Media’s 2021 list of Military Friendly Employers.

**Meeting the Needs of Individuals with Disabilities**

We are continually working to better accommodate the needs of individuals with disabilities within our workforce. To support this effort, we survey our employees every five years, using the Department of Labor self-identification form CC-305. In 2020, we conducted a new survey through which 20% of respondents self-identified their disability status. To better serve employees who need accommodations, we have a new tracking system to identify commonly requested accommodations and describe best practices for addressing them.

Vets bring the skills WM needs: safety culture, teamwork, chain of command and clear lines of communication. These are hallmarks of well-trained service members and WM employees.”

Robert Hall, District Manager
Diversity at WM
(as of and for the year ended December 31, 2020, unless otherwise noted)

Board of Directors*  
22% ethnic minorities  
33% women  
*as of 9/1/21

Senior Leadership Team  
22% ethnic minorities  
33% women

Company Officials & Managers  
22% ethnic minorities  
21% women

Workforce  
44% ethnic minorities  
18% women

Employees by Region  
45,200 U.S.  
2,155 Canada  
895 India

WM Workforce

- 55% White
- 22% Hispanic
- 19% Black or African American
- 2% Asian
- 1% Indigenous or Native
- 1% Employee chose not to report

Employees by Age Group

- 11% Under 30 (born after 1991)
- 49% 30-50 (1991-1971)
- 40% Over 50 (before 1971)
People First

Talent Engagement & Retention

We continue to strengthen WM as a workplace of choice through competitive pay, excellent benefits for long-term financial and personal health, a safe and accessible work environment, opportunities for growth and a focus on sustainability.

Employee turnover continues to be a concern in the environmental services industry due to high demand in a strong economy for skilled workers—especially truck drivers, route managers and maintenance technicians. We also compete against other industries for certain talent, such as the oil and gas industry for engineers in our renewable energy facilities.

By promoting from within and offering a wide variety of training opportunities, WM helps employees maximize their effectiveness and grow in their careers.

WM is committed to providing a living wage to all employees, which is defined as the minimum pay received for the basic number of working hours to ensure coverage of workers’ and their families’ basic needs. During the pandemic, we also guaranteed all full-time hourly employees’ pay for a 40-hour work week, regardless of COVID-19-related service decreases.

WM is committed to fair treatment of all employees. With 9,026 union employees in the U.S. and Canada—19% of our workforce—this commitment is met according to the practices and expectations agreed to within the collective bargaining unit. For non-union employees, we look for ways to reinforce our fair treatment and continuous learning culture.

Engagement Through Communication

Communication between company leaders and employees at all levels fosters honesty, accountability and respect, all of which are critical to employee retention. Each quarter, senior leaders host a town hall-style meeting that covers a variety of topics, available to all employees via live-streaming technologies. Employees unable to attend can submit questions by email and view a replay on our intranet and our employee mobile app, WM Now.

WM Now is a one-stop shop for all things WM, making critical information available for field employees who may not have access to a desktop computer at work. This includes COVID-19 safety updates; access to employee benefits and our employee handbook; episodes of “The Route,” our internal podcast; employee engagement efforts; and stories from across the company. We were pleased to achieve our goal of 80% adoption of the app within 10 months and adoption by our new team members from ADS in less than six months. Analytics tell us which features employees find most useful, and we use those insights, as well as qualitative feedback, to further refine the WM Now experience.

Voluntary Employee Turnover Rates (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<tr>
<td>Rate</td>
<td>15.1</td>
<td>15.0</td>
<td>15.2</td>
<td>12.4</td>
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</tbody>
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Employee Turnover Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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</thead>
<tbody>
<tr>
<td>Rate</td>
<td>22.2</td>
<td>22.0</td>
<td>21.0</td>
<td>16.6</td>
</tr>
</tbody>
</table>
WM also has a weekly internal newsletter with stories on employee safety, leader communications, potential job hazards, employee successes, updates on benefits and career opportunities and more. Every quarter, answers to questions that were not addressed during the live-streamed town hall are included in the newsletter, which is distributed by email, posted in lunchrooms and available through WM Now. Communication is a two-way street, so we regularly gather input from employees on how we can improve. Throughout 2020, we solicited feedback through informal conversations with leadership and voluntary pulse surveys. These surveys inform not only strategic priorities, but also let us know which communication channels employees find most useful.

Reimagining the Workday
For many, the pandemic opened the door to new ways to work. While WM’s frontline workers did not have the option to work remotely, changes in our volumes, as well as a recognition of the high levels of turnover among this segment of our workforce, presented an opportunity to do things differently to improve workers’ quality of life.

Many of our operations technicians work overnight to ensure that collection trucks are ready to begin their routes each day. This schedule presents communication challenges between day and night shift workers whose paths never cross. Managers at the Southern West Virginia and Charleston Hauling sites decided to try a different approach. By using staggered start times, they enabled all technicians to work during the day. Once all technicians at a site spent a few hours per day working side by side, morale began to improve. Managers had better oversight of their teams’ performance and could more easily offer coaching when needed. The new schedules also improved the level of truck maintenance in our rotational fleet. Employees have cited better quality of life, increased ability to spend time with family and better relationships with fellow technicians as benefits of this new approach.

Since the success of the program at the two West Virginia facilities, day shifts have expanded to 60% of our maintenance facilities, with plans for a transition across all operations.

Creating Employment Opportunities for All
WM is also growing our workforce by increasing the pool of candidates from which we recruit. Through the Innovative Employment Pathways (IEP) program, WM and our partners are creating a new pipeline of talent for our business—while helping to chart a new course to change lives. IEP is a recruitment program that provides second-chance employment opportunities to overlooked and underserved community populations, including those who have experienced homelessness, displacement, incarceration and significant employment gaps. Together with leading partner organizations specializing in job readiness programs, we are casting a wider net to reach nontraditional applicants.

The program begins with core training for all participants and a survey to determine what skills individuals bring and what additional training they might need. Participants then attend a “welcome day” at a WM facility where they learn more about the program and a typical day on the job. If they choose to enroll in IEP, individuals spend 90 days working as helpers, sorters and laborers at WM materials recovery facilities (MRFs). During this period, they learn more about possible career paths as drivers, technicians and customer service representatives. After the 90-day period, IEP participants may have the opportunity to transition from temporary to permanent positions at WM. Following initial pilots in Dallas and Chicago, we are expanding IEP in 2021 with plans to be active in at least five market areas or regions by the end of 2021, with the goal of activation at 80% of our facilities and 1,000 participants obtaining work experience by 2025.

William (Doug) McGhee
Technician

“I embraced the schedule change and it worked. It has improved my lifestyle in many ways.”
In October 2020, WM completed its acquisition of Advanced Disposal Systems (ADS), a waste disposal, collection and recycling services provider.

With this acquisition, WM gained access to new customers and supporting infrastructure in 16 eastern and midwestern U.S. states.

Post-acquisition, we worked on integrating WM’s and ADS’s routes and customer networks. We relied on technology including geo-coding, mapping and proprietary algorithmic software to overlay our assets and preemptively address any challenges.

Perhaps the most important aspect of the integration process, however, was the onboarding of 5,000 legacy ADS employees to the WM team. One of the first steps in this process was a focused effort to understand the cultural similarities and differences between ADS and WM. We conducted surveys in advance of the acquisition’s official closing date, which allowed us to develop a game plan including welcome packets, events and other informational resources. As a result of this work, WM developed a new “day one” experience framework for employees that we will deploy during future acquisitions. New-employee training took place through early 2021, and we now have a fully integrated team that is nearly 50,000 members strong.
Training & Development

WM offers expansive learning and development solutions to meet the needs of our people, as well as proactively recognizing good work and supporting opportunities for growth and improvement.

Our talent management program is designed to reach employees at all levels and is an important way we maximize engagement and retention. Hiring, selecting and developing future leaders, as well as evaluating employees in alignment with our values, is standard across the enterprise.

WM’s workforce of nearly 50,000 includes a wide range of roles that require an even wider variety of skill sets, so our training programs are equally varied.

Training types fall into a few broad categories:

- **Compliance training**—Required of all employees, such as training on WM’s [Code of Conduct](#) and [Cybersecurity](#).
- **Professional development and leadership training**—Often customized and conducted voluntarily as part of an individual’s development plan.
- **Tailored new hire training**—Including collection and fleet operations, post-collection operations and sales.
- **Safety training**—Conducted upon hire and on an ongoing basis, especially geared toward drivers, fleet technicians, heavy equipment operators and sorters.
- **Environmental excellence and compliance training**—Required of employees in specific roles.

We measure the effectiveness of training in a variety of ways, depending on the goals and type of training. For example, we might conduct evaluations to understand participants’ reactions to a course, assessments to measure the knowledge they have gained or observations to see how they apply new skills on the job.

In addition to training, we manage performance through regular check-ins, coaching and feedback, goal-setting and annual performance reviews. Annual evaluations set accountability expectations for employees with the understanding that progress is monitored throughout the year. Talent reviews and succession planning are designed to recognize and reward high-performing and hard-working employees.
How We Help Employees Learn

Our objective is to create a continuous learning culture that drives performance and supports a superior customer experience. With a vast and decentralized workforce, we take a “learner-centric” approach that allows employees to learn in the ways that are most effective and convenient for them. Our training is delivered in several modalities, including in-person at one of our two training facilities, virtual instructor-led training, online training, self-study and video modules. All required training is produced in English, Spanish and French.

Our WM Talent Central platform contains approximately 3,600 learning modules available to all employees. The content covers all aspects of the company’s operations, along with key topics that support career advancement. This learning library is always growing. In 2020, the Learning & Development team produced 530 individual deliverables through 91 initiatives, including a combination of web-based and instructor-led training, eLearning modules, videos, instructional guides and job aids. WM also partners with two third-party content providers who offer additional courses that are continually updated. As we transitioned from the office to remote work, then gradually returned to the office over the past year, we provided training to help employees manage change.

We also recognize the value of learning that occurs beyond WM. In 2021, we announced a new education benefit, Your Tomorrow. Your Tomorrow was created in partnership with Guild Education to pay 100% of benefits-eligible employees’ and dependents’ tuition for 135+ business, technology, science and mathematics bachelor’s degrees and master’s programs. WM is the first company to extend this type of benefit to family members—a clear example of our commitment to putting People First. The program is currently available to U.S.-based team members, and we are reviewing solutions for employees in Canada and India.

2020 Training

$600 average spent on training per full-time employee

30 average training hours per employee

332,578 total hours spent in annual training among full-time employees
Safety

A large number of our team members are drivers, heavy equipment operators and sorters—critical jobs that carry inherent risks. For nearly 20 years, we have engaged employees on safety practices through the Mission to Zero (M2Z), where the “Zero” represents zero tolerance for unsafe actions or conditions.

By engaging employees around prevention rather than simply tracking outcomes, we strive to address hazards before they endanger employees. Throughout 2020, M2Z’s theme was a “focus on the fundamentals.” With the addition of ADS operations to many WM areas, and changes witnessed due to the pandemic, we took the year to focus on the execution of existing safety programs and initiatives. Our team also began conducting safety training for all ADS team members as soon as the acquisition was complete.

A Year of Safety Progress

As a result of our continued commitment to programs that improve roadway safety, and a focus on reducing the frequency and severity of employee injuries, 2020 was a successful year in terms of WM’s safety performance. Despite the impacts COVID-19 had across our operations, we saw overall improvement across all four primary metrics that we use to track progress: Total Recordable Incident Rate (TRIR), Days Away/Restricted or Transferred (DART), Vehicle Accident Recordable Rate (VARR) and Hourly Accident Recordable Rate (HARR).

To understand vehicle incident performance across operations of varying sizes, we use VARR, which tracks vehicle-on-vehicle accidents; and HARR, which tracks vehicle accidents including vehicle-to-vehicle and vehicle-to-property accidents. On both of these metrics, our teams improved significantly in 2020, achieving 14% and 5% year-over-year improvements, respectively. We achieved this level of safety due to an extreme focus on our WM SAFETY defensive driving system as traffic patterns changed, continued coaching on backing-related incidents and reduced roadway traffic early in the year. Having achieved noteworthy performance during a challenging year, the theme that has now permeated throughout WM’s safety organization is “don’t give it back.” We look forward to applying lessons learned over the past year to maintain and improve levels of performance.
**Total Recordable Incident Rate (TRIR)**

Over almost two decades, our rate of injuries per employee hours worked has continued to fall. According to published U.S. Bureau of Labor Statistics (BLS) data, WM has consistently outperformed our industry on TRIR since 2005. WM continues to take active steps to further prevent injuries through our injury and illness management program, hazardous energy control program and other initiatives tied to seasonal risks, including heat illnesses in the summer and slips, trips and falls in the fall and winter.

**Days Away/Restricted or Transfer (DART)**

OSHA uses DART rates to track and report work-related injuries and illnesses that result in lost time, restricted duty or transfer to another work function. WM has outperformed our industry since 2005, including days away from work due to injury, and this metric has continued to improve. In addition to the programs and awareness campaigns introduced to prevent all injuries and illnesses, WM has taken a structured approach to reducing the severity of incidents through safety processes that limit risk. We also work to provide prompt and complete medical care for employees who have suffered a work-related injury or illness to support their return to full duty as quickly as possible.

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1 TRIR and HARR data are for the U.S. and Canada only.
**Vehicle Incident Frequency: Vehicle Accident Recordable Rate (VARR) and Hourly Accident Recordable Rate (HARR)**

There are no standard metrics for measuring vehicle incident frequency in the waste industry. Of these two metrics, we believe HARR is most useful because it encourages the completion of a root cause investigation on all incidents involving a WM vehicle. This focus on behaviors rather than on outcome of vehicle accidents helps lead to interventions that prevent future accidents. The long-term trend in the number of hours between incidents (both VARR and HARR) has increased, indicating continuous improvement in our incident performance.

**WM VARR** (hours between incidents)

![Graph showing WM VARR over time]

**WM HARR** (hours between incidents)

![Graph showing WM HARR over time]

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1 Beginning in 2016, WM decided this metric would be more informative if we exclude specific incidents where Other Vehicles Initiated Impact (OVII). This action resulted in a significant improvement in both VARR and HARR from that year onward. As we further refine our vehicle incident tracking, we will continue to evaluate potential methods for contributing to an industry-wide vehicle incident tracking metric.
Striving for a Safer Tomorrow

A well-trained workforce is a safer workforce. It is also one that works more consistently, which allows us to limit costs and serve our customers as effectively as possible. These three objectives—safety, service and savings—are the heart of the WM Way program, a new set of standards followed by Collection, Dispatch and Fleet Operations to help teams carry out complex and routine tasks. It includes standardized daily processes to ensure vehicle inspections are performed correctly and drivers routed properly, daily employee and leadership huddles and a consistent performance management process.

These structured processes are designed to foster knowledge-sharing and employee engagement—as well as to help shift mindsets and create a culture of continuous improvement and teamwork. To track the effectiveness of WM Way as it is implemented across sites, we created a monthly scorecard which scores each area on eight indicators of safety, service and savings. To date, 72% of WM facilities are WM Way-certified.

Staying Safe During COVID-19

WM has a zero-tolerance policy regarding the most serious risks employees face. These “life critical rules” include ongoing training on the proper procedures regarding hazardous energy control, using safety devices correctly and always maintaining a safe distance from people, vehicles and hazardous energy sources. WM has a responsibility to create and maintain the safest possible work environment for all employees, which is one way we put People First.

Another way we put People First is by incorporating their insights into our decision-making processes. In early 2021, WM conducted a comprehensive safety assessment consisting of an anonymous survey and listening sessions with employees. The purpose of the assessment was to better understand the current state of our safety programs, with the goal of creating improved strategies to implement in 2021 and 2022. We also engage other transportation and service sector leaders who share best practices and participate in dialogue related to training, recruiting, retention, technology and more.

As an industry leader in the safety space, WM is committed to continuous improvement at our sites and in the communities where we work. This approach informed our response to the pandemic. After recognizing the critical role teamwork would play in an effective response, our Safety Services and People teams worked closely with senior leadership to monitor public health requirements, establish response guidelines, monitor cases and provide field guidance to ensure employee safety. We quickly developed a business continuity plan that included guidance to all facilities for operating safely throughout the crisis.

In the spring of 2020, teams implemented safe distancing and cleaning procedures within facilities and vehicles, in some instances using internally developed plexiglass partitions that were used to separate employees riding together in collection trucks. We also relied on technology, including the WM Now app and other tools for timekeeping, virtual employee huddles, equipment monitoring and customer support. To limit employees’ exposure and respond to the shift from commercial to residential waste volumes during the pandemic, we devised an “optimal work week” that shortened some employees’ schedules to four days per week. In addition to enhancing safety, this arrangement offered employees an improved work-life balance.

Safety on the Road

As a company whose drivers must travel daily to serve customers, WM has a range of programs to address risks unique to road safety and transportation. An increase in automation helps to mitigate some of these risks. For example, 66% of our residential routes rely on automated or semiautomated loading equipment, which reduces the number of times our employees must exit the truck while collecting trash and recyclables. This technology helps reduce fatigue and the potential for employee incidents. Automated equipment also limits the need for employees to bend and lift heavy bins, which decreases the risk of sprains and strains. Other forms of automation are advanced driver assistance systems, which include collision mitigation, active braking technology that takes over control of our trucks to prevent potential collision when a driver does not react quickly enough and vehicle telematics that communicate any needed repairs to our shops. Beyond the safety benefits, these enhancements lead to greater driver satisfaction and retention.
We continue to transition from manual to automated collection technologies as contracts come up for renewal.

In 2020, we upgraded video event recorders on some trucks, with the remainder of the upgrades occurring in 2021. This technology uses machine vision and artificial intelligence to detect behaviors such as unsafe following distance, immediately alerting drivers of unsafe behavior.

The WM SAFETY Defensive Driving System provides safe driving instruction that is specific to waste-collection vehicles. The system is refreshed monthly with videos that address hazards in drivers’ daily operating environments. Topics include safe backing, following distances, pedestrians, bicyclists, rollover prevention and more.

Videos are paired with discussions, observations and coaching to ensure consistent understanding among all drivers and managers. In 2020, we released Driver Science Series videos related to changes in traffic patterns due to COVID-19 travel restrictions. We also plan to launch a new Driver Vehicle Inspection Process in 2021.

Improved road safety policies also help keep drivers safe. Collection drivers must constantly be on the lookout for other drivers, particularly those in a hurry to pass collectors during stops, which is when accidents often occur. WM supports “Slow Down to Get Around” legislation, which requires drivers to slow down when passing collection trucks. To date, 23 states have passed this law, and the National Waste and Recycling Association is leading the effort to pass the law nationwide.

56% improvement in safe driving behavior since 2014

Honoring Drivers of the Year

The annual WM Driver, Operator and Technician of the Year Program is one way we honor the very best of WM—teammates who truly embody our shared Commitments & Values. Out of 555 nominations, company leaders chose 12 as our 2020 Drivers, Technicians, Landfill Operators and MRF Operators of the Year.

Among them was Darrel McNeil of Richmond, Virginia, who has been driving for WM for 22 years. According to his manager, Frederick Fraijo, “Darrel takes it upon himself to provide exceptional quality of service to every person he encounters along his route, whether they are a WM customer or not.” McNeil has become known in the communities he serves for interacting with children and keeping neighbors and pets safe. He has also been featured by the Virginia Waste Industries Association for spreading awareness about the “Slow Down to Get Around” Law.
Facility Safety
Just as we work to continually improve the safety of fleet personnel through technology, legislation and training, we also work with trade associations, customers and communities to identify how they can protect employees within our post-collection facilities, which include transfer stations, MRFs and landfills.

Protecting MRF Employees
We are increasing safety in recycling facilities through improved processing equipment, additional operating protocols and efforts to reduce inbound contamination from recycling bins. For example, new safety interlocks create safeguards that prevent workers from encountering unsafe situations and shut off systems automatically when doors are opened or when guards are removed for equipment maintenance. Predictive maintenance tools allow us to test and repair equipment based on data, rather than waiting for failure. This ensures technicians’ schedules are predictable and helps keep them out of potentially dangerous conditions. We will launch a new WM Facility Electrical program by early 2022.

Improving Safety for Solo Workers
At certain closed landfills, renewable energy plants, maintenance shops and recycling drop-off facilities, staffing may be limited to a single person. We monitor the safety of these “lone workers” using a new technology known as Blackline. Blackline supplies mobile monitoring devices that send an alert signal when certain conditions are sensed, such as a gas leak, a fall or an impact, or when manually activated by the employee. The signal is then transmitted to a monitoring service, staffed 24/7, which notifies local emergency response personnel and WM’s security operations center.

At our recycling facilities, contaminants, such as “tanglers” that must be manually cut out of processing equipment and lithium batteries that can ignite when their casing is compromised, pose serious threats to the safety of processing recyclables. An important component of increasing facility safety is educating the public on the hazards created by contamination. We are working with industry stakeholders and community groups to emphasize the need to recycle right.
Climate Change

In This Chapter:

- Overview
- Reducing Our Carbon Impact
- GHG Emissions Avoided
- Beneficial Use of Landfill Gas
- Fleet Emissions
- Facility Energy Use
The People Behind Our Progress:

Amanda Duchesne, Landfill Supervisor

For as long as she can remember, Amanda Duchesne was drawn to the outdoors.

“I just loved the mud and the dirt,” she said. She spent summers working as a camp counselor and knew she wanted to pursue a career in science.

A degree in environmental geology led her to a role as a Landfill Supervisor at WM’s Simi Valley Landfill in Southern California. There, she helps oversee the many practices that keep a landfill safe and environmentally sound, such as the conversion of methane gas into renewable energy. She also helps determine how to manage portions of the landfill that have reached capacity.

Duchesne recently appeared in a CBS Los Angeles segment on people who make an impact through science, technology, engineering, art and math (STEAM) careers. Her advice to aspiring scientists: “Find your inner nerd and feed it.”
Opportunities to Serve
Our Customers

At the same time, the impacts of climate change present opportunities to operate differently. Our customers are as concerned about these issues as we are and want to use products and services that will not have adverse impacts on the environment. Increasingly, customers seek out companies and suppliers who are reducing or avoiding GHG emissions; embracing recycled, reusable and recyclable materials; using renewable energy; and providing long-term liability protection. Customers also want reassurance that services will be provided in the event of natural disasters and emergencies that are becoming increasingly frequent and severe.

Climate Risks We Face
Climate change impacts our business in multiple ways. Extreme weather events such as droughts, floods, wildfires and storms have the potential to disrupt service; damage our facilities and fleet; and affect our employees, customers and the communities where we live and work. These considerations affect all aspects of our operations, services, goals and short- and long-term business strategy.

Overview
Mitigating climate change underlies everything we do.

With the United States’ renewed commitment to the Paris Agreement to limit global warming to no greater than 1.5 degrees Celsius above preindustrial levels, our focus on climate has only grown stronger. We have committed to setting a Science Based Target Initiative (SBTi)-approved goal in 2022. Reaching this goal will require big ideas, bold action and leadership across industries, and WM is proud to be part of the solution.

Technology and innovation are advancing faster than ever, providing us with new and better ways to capture landfill gas for beneficial use, measure fugitive emissions and transform our fleet. WM offers solutions to help our customers minimize their carbon footprint and lower their environmental impact alongside our own. In fact, the services we provide currently decrease and avoid three times more greenhouse gas (GHG) emissions than we generate in our operations. By 2038, our goal is to reduce and avoid four times the GHG emissions we generate through our operations.

Climate Change
Reaching our 2038 goal will require making operational improvements to decrease our own emissions.

Our fleet emissions were reduced by 16% in 2020. Since 2010, we have reduced GHG emissions from our total collection and support fleet by 43% for every 1,000 miles driven. We’ve achieved these reductions through logistical efficiencies, transitioning to natural gas vehicles, and by increasing our use of renewable fuel. To make progress in each of these areas, WM continues to develop and deploy technology solutions and programs to reduce emissions from our operations while also engaging in policy discussions at the federal and state level and supporting strategies to reduce emissions associated with our industry.

In January 2020, a novel strain of coronavirus was declared a Public Health Emergency of International Concern and was subsequently declared a global pandemic in March 2020. COVID-19 began to impact our business in March 2020, affecting most geographies and across a variety of our customer types throughout the rest of the year. On October 30, 2020, we completed our acquisition of Advanced Disposal Services (ADS), which increased our number of employees, facilities and assets. Results of these impacts may be reflected in the 2020 data below. Further details on year-over-year changes may be found in the applicable sections of WM’s ESG Resource Hub.

Lowering Our Operational Footprint

The charts on the following page represent 100% of WM’s Scope 1 and 2 GHG inventory, which is third-party verified and reported to CDP. These emissions make up the numerator portion of our environmental goal to reduce, avoid or offset four times the emissions we generate in our operations, represented in the part of the 2020 bar chart on page 8 that is above the “0” line of the How We Measure Our 4X Goal infographic. For a discussion of the protocols that govern these calculations, please see our Carbon Footprint Calculation Methodology.

We use the modified 100-year global warming potentials (GWPs) promulgated by the U.S. EPA. Pertinent to our carbon footprint, our Scope 1, 2 and 3 emissions calculations use the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (FAR) GWP. However, prior to 2019 our Scope 2 emissions from purchased electricity used the IPCC Second Assessment Report (SAR) GWP.
Landfill Emissions (MMT CO₂e)¹

Our landfill emissions are from active and closed facilities. Even as we collected fewer tons of waste at our landfills in 2020, WM collected more landfill gas at our sites, year-over-year, compared to 2019. However, the methodology used in the U.S. to model landfill emissions, combined with the additional emissions from the ADS acquisition, resulted in WM reporting more emissions. Emissions from ADS landfills make up 30% of the increase, with the remaining increase attributed to the landfill modeling methodology used by the industry for reporting.

The uncertainty associated with landfill emissions methodology has been the key driver in WM’s goal to develop more accurate methods for determining landfill emissions by 2025. We continue to expand our work with various private and government entities employing ground, aerial and satellite-based measurements of our sites. In 2021, we initiated efforts to design a centralized data management and analytics system that will allow for predictive modeling and targeted investments in operations to drive further emissions reductions. We also conducted an enterprise-wide review of best practice procedures that we are implementing as part of our daily operations of continuous improvement to manage and reduce emissions at our landfills.

Collection Fleet Emissions (MMT CO₂e)²

In 2020 we reduced our emissions by 16% year-over-year, despite an additional 2,196 diesel collection trucks from the ADS acquisition.

We have reduced our fleet emissions by 43% over the last decade, and reached our 2025 goal to lower emissions from our collection fleet.

Electricity Emissions (MMT CO₂e)³

WM’s Scope 2 emissions from purchased electricity are less than 1% of our total emissions. Overall electricity use decreased in 2020, and we are currently working with our vendor to implement renewable electricity contracts to meet our 2025 goal of using 100% renewable electricity.

Other Energy Use Emissions (MMT CO₂e)

This graph includes emissions from our "yellow iron" (i.e., off-road equipment such as forklifts and excavators), heating fuel, jet fuel, propane and a small amount of other fuels. Emissions increase is mainly attributed to other energy use associated with the ADS acquisition.

¹ The amount of landfill gas that is collected is measured; the amount of landfill gas generated and emitted to the atmosphere as fugitive emissions must be estimated using prescribed calculation methodologies. The applicable methodologies are the Solid Waste Industry for Climate Solutions (SWICS) Protocol and the U.S. EPA Greenhouse Gas Reporting Program (GHGRP) rules.

² The methodology for calculating fleet emissions conforms to U.S. EPA’s SmartWay Program. SmartWay calculations use records compiled for tax credit and fee purposes. The tax documentation reflects fuel purchased in a year, including insignificant amounts of fuel stored rather than used in a given year. The graph excludes biogenic emissions, as per the Greenhouse Protocol. Biogenic emissions are reported separately.

³ We use the modified 100-year global warming potentials (GWPs) promulgated by the U.S. EPA. Pertinent to our carbon footprint, our Scope 1, 2 and 3 emissions calculations use the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (FAR) GWP. However, prior to 2019 our Scope 2 emissions from purchased electricity used the IPCC Second Assessment Report (SAR) GWP.
Addressing Climate Change Through Our Services

To reach our 2038 goal, WM will also scale up the low-carbon services and solutions that we provide to our customers. For example:

- Using recycled feedstock in place of virgin resources requires less mining and processing of raw materials, reducing emissions in the manufacturing process.
- Reducing food waste avoids emissions associated with growing, processing and transporting food.
- Leveraging our CORE® organics recycling process transforms urban food waste into a source of renewable energy.
- Applying compost products created from organic materials improves soil structure and provides nutrients, reducing the GHG emissions associated with fossil fuel-based fertilizer.
- Creating renewable energy from waste at our landfills reduces the need for energy from fossil fuel.
- Installing our Carbon Blocker™ fly ash treatment system at coal-fired power plants converts fly ash with increased carbon levels into a cement replacement in concrete.
- Working with WM Sustainability Services helps customers shrink their carbon footprints and achieve climate goals.
GHG Emissions Avoided

WM’s low-carbon products and services reduce, avoid or offset several times the emissions we generate in our operations.

We report this data to inform our stakeholders of the potential GHG reduction benefits associated with our renewable energy production and the value of the recyclable and compostable materials we collect and process. We are not presuming to characterize how emerging regulatory programs will allocate credit for these avoided emissions, and we do not deduct these reductions from our carbon footprint.

Renewable Energy Generation (MMT CO₂e)

Landfill gas is captured, converted and used as a renewable energy resource in the form of electricity or fuel at 146 WM landfills.

Customers purchase our renewable energy in lieu of using electricity from the grid, thereby reducing their use of fossil fuel. We record the total megawatt hours of renewable energy sold, then use the appropriate conversion using eGRID emission factors to arrive at the total emissions avoided.

Emissions represented here are avoided by our customers; they are not included in our carbon footprint.

Recycling of Materials (MMT CO₂e)

The U.S. EPA’s Waste Reduction Model (WARM) is used to calculate the life cycle GHG emission benefits from recycling. Note that instead of using the WARM "national average landfill" defaults, WM uses company-specific settings to account for our own landfill gas-to-energy capacity. Additionally, the increase in emissions reductions realized by recycling does not correspond arithmetically to the increase in total tons recycled. That is because, for example, paper recycling achieves very high emissions reductions, while the emissions reduction potential associated with glass recycling is nominal on a per ton basis. COVID-19 impacted the volume of material collected and the associated avoided emissions. Emissions represented here are avoided; they are not included in our carbon footprint.

Carbon Permanently Sequestered (MMT CO₂e)

U.S. EPA recognizes the value of carbon sequestered at landfills. This number is not included in our carbon footprint.
Across North America, renewable energy use is on the rise. Thirty U.S. states, as well as Washington, D.C. and three territories, have adopted a renewable portfolio standard, and one in three Americans now live in a state that has achieved, or is committed to achieving, 100% clean electricity.

As a user and generator of renewable energy, as well as the owner of land used to host renewable energy projects, WM is at the center of our country’s evolving energy transition. Here are a few of the ways we play a part.

**Beneficial Use of Landfill Gas**

At facilities across North America, WM treats thousands of standard cubic feet per minute of landfill gas. We process increasing amounts of this gas for use as renewable electricity or renewable fuel.

**Natural Gas Fleet**

WM has the largest compressed natural gas truck fleet of its kind in North America. The fuel for our trucks includes renewable natural gas from our own landfills as well as other biogas sources.

**Energy from Food Waste**

Through WM’s proprietary organics recycling process, known as CORe®, commercial food waste is injected into treatment facility digesters in a wastewater treatment plant. The process increases biogas production, which can then be used as a renewable source of energy.

**Clean-Powered Facilities**

We are working toward a 2025 goal to power our facilities with 100% renewable electricity, including from wind, solar, waste heat and landfill gas.

**Renewable Energy Installations**

Wide-open spaces and remote locations make closed landfills ideal sites for solar and wind installations. WM hosts 100 MW of wind power and 53.9 MW of solar capacity at our closed landfills.
Beneficial Use of Landfill Gas

When organic material decomposes in an anaerobic environment such as a landfill, it naturally produces gases that include methane.

Landfill gas, or biogas, is recognized by the U.S. EPA as a renewable energy resource and is used beneficially as a fossil fuel alternative. WM captures landfill gas and turns it into renewable electricity and fuel at 146 of the active landfills we own or operate. Crucially, biogas is a form of “baseload” renewable energy, which means it can be used nearly continuously, unaffected by changes in weather or other variables. Today, WM operates the largest landfill gas-to-energy program in North America, generating five times more renewable electricity from our landfills than we use as a company.

Beyond electricity generation, we are also a leader in converting landfill gas into natural gas fuels that are distributed for use in residences, businesses and commercial vehicles, including our own. Renewable natural gas (RNG), produced from processed landfill gas, now fuels over 55% of our natural gas trucks.

We are continually looking for opportunities to develop projects that enable landfill gas to be beneficially used as renewable electricity or renewable fuel, including nitrogen rejection technologies and new forms of carbon capture. Proximity and accessibility to energy infrastructure makes projects more cost effective. While larger landfills tend to have greater potential, smaller landfills can also support beneficial use projects.

WM Landfill Gas Beneficial Use Projects

<table>
<thead>
<tr>
<th>Type of Project</th>
<th>Projects</th>
<th>MW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Renewable Electricity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processed gas can be used to fuel electricity generators. The electricity is then sold to public utilities, municipal utilities or power cooperatives. Under these arrangements, the amount of renewable electricity delivered into the grid by one user must equal the amount of renewable electricity taken off the same grid by another user. These processes have been used to offset traditional electricity with renewable energy for decades.</td>
<td>100</td>
<td>360</td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off-Site Power</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td><strong>Renewable Fuel</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas can also be processed to pipeline-quality renewable natural gas that is fully interchangeable with conventional natural gas and is sold to natural gas suppliers. For other projects, gas is used at the landfill or delivered by pipeline to industrial customers as a direct substitute for fossil fuels in industrial processes. Finally, for a small number of projects, gas is piped to an off-site third party and used as heating fuel.</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Medium BTU Fuel</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Liquid Waste Disposal</td>
<td>16</td>
<td>30</td>
</tr>
<tr>
<td>Renewable Natural Gas</td>
<td>146</td>
<td>431</td>
</tr>
</tbody>
</table>
WM Landfill Gas Project Locations

Gas to Industrial Customers
- Piedmont, AL
- Ragland, AL
- Campbeltown, FL
- Baton Rouge, LA
- Frederic, MI
- Harrison, MI
- Maple City, MI
- Zeeland, MI
- Sugar Creek, MO
- Houston, MS
- Pass Christian, MS
- Bennington, NE
- Watford, ON
- Pine Grove, PA
- Somerset, PA
- Welsboro, PA
- Ste-Sophie, QC
- Dorchester, SC
- Elgin, SC
- Charles City, VA
- Gien, NY
- Jettersville, VA
- King George, VA
- Waverly, VA
- Berlin, WI
- Wisconsin Rapids, WI
- Jacksonville, AR
- Springdale, AR
- Surprise, AZ
- Livermore, CA
- Novato, CA
- Aurora, CO
- New Milford, CT
- Campbeltown, FL
- Naples, FL
- Pompano Beach, FL
- Dry Branch, GA
- Savannah, GA
- Valdosta, GA
- Lake Mills, IA
- Mitchellville, IA
- Beecher, IL
- Calumet City, IL
- Davis Junction, IL
- East Peoria, IL
- Elgin, IL
- Grayslake, IL
- Naperville, IL
- South Elgin, IL
- Taylorville, IL
- Wilmington, IL
- Danville, IL
- Elkhart, IN
- Logansport, IN
- Michigan City, IN
- Monticello, IN
- Portland, IN
- Winslow, IN
- Wyatt, IN
- Topeka, KS
- Irvine, KY
- Morehead, KY
- Chicopee, MA
- Granby, MA
- Taunton, MA
- Westminster, MA
- Norridgewock, ME
- Birch Run, MI
- Harrison, MI
- Lennon, MI*
- New Haven, MI*
- Orion, MI*
- Burnsville, MN
- Elk River, MN
- Glencoe, MN
- Houston, MS
- Kernersville, NC
- Bennington, NE
- Rochester, NH
- Virginia City, NV
- Boonville, NY
- Chaffee, NY
- Fairport, NY
- Lincoln, NY
- Rigas, NY
- Geneva, OH
- Glenford, OH
- New Springfield, OH
- Carp, ON
- Petrolia, ON
- Arlington, OR
- McMinnville, OR
- Erie, PA
- Greencastle, PA
- Morrisville, PA
- Newburg, PA
- Pen Argyl, PA
- Pine Grove, PA
- Taylor, PA
- Washington, PA
- Drummondville, QC
- Elgin, SC
- Wellford, SC
- Camden, TN
- Heiskell, TN
- Aledo, TX
- Austin, TX
- Cleveland, TX
- Lewisville, TX
- New Braunfels, TX
- San Antonio, TX
- The Colony, TX
- Charles City, VA
- Gien, NY
- Hampton, VA
- Jetersville, VA
- King George, VA
- Waterbury, VT

Renewable Electricity
- Portland, OR
- Vancouver, WA
- Bremerton, WA
- Toppenish, WA
- Forest Grove, OR
- Prairie City, OR
- Home, OR
- Roseburg, OR
- Kendal, OR
- Cornelius, OR
- Newberg, OR
- Ridgefield, WA
- Naknek, AK
- Bealeton, VA
- Christiansburg, VA
- Glen Allen, VA
- Chesterfield, VA
- Culpeper, VA
- Manassas, VA
- Fort Washington, MD
- Oceanside, CA
- Sun City, CA
- Rocky Point, CA
- Gilroy, CA
- Santa Rosa, CA
- Stockton, CA
- Stockton, CA
- Ironton, MO
- Joplin, MO
- Rolla, MO
- West Plains, MO
- Champaign, IL
- Bloomington, IL
- Champaign, IL
- Springfield, IL
- Decatur, IL
- Macomb, IL
- Galena, IL
- Westville, IL
- Pontiac, IL
- Du Quoin, IL
- Eldorado, IL
- Galena, IL
- Hillsboro, IL
- Portage, IN
- Gary, IN
- Lowell, IN
- South Bend, IN
- Michigan City, IN
- La Porte, IN
- Michigan City, IN
- Vincennes, IN
- Bedford, IN
- Noblesville, IN
- Lafayette, IN
- Lawrenceburg, IN
- Portland, IN
- Wellwood, KY
- Pekin, IL
- Peoria, IL
- Tazewell, IL
- Danville, IL
- Columbia, MO
- Kansas City, MO
- Olathe, KS
- Lawrence, KS
- Kansas City, KS
- Junction City, KS
- St. Marys, KS
- Excelsior Springs, MO
- Kansas City, MO
- Jonesboro, AR
- Springdale, AR
- Surprise, AZ
- Livermore, CA
- Novato, CA
- Aurora, CO
- New Milford, CT
- Campbellton, FL
- Naples, FL
- Pompano Beach, FL
- Dry Branch, GA
- Savannah, GA
- Valdosta, GA
- Lake Mills, IA
- Mitchellville, IA
- Beecher, IL
- Calumet City, IL
- Davis Junction, IL
- East Peoria, IL
- Elgin, IL
- Grayslake, IL
- Naperville, IL
- South Elgin, IL
- Taylorville, IL
- Wilmington, IL
- Danville, IL
- Elkhart, IN
- Logansport, IN
- Michigan City, IN
- Monticello, IN
- Portland, IN
- Winslow, IN
- Wyatt, IN
- Topeka, KS
- Irvine, KY
- Morehead, KY
- Chicopee, MA
- Granby, MA
- Taunton, MA
- Westminster, MA
- Norridgewock, ME
- Birch Run, MI
- Harrison, MI
- Lennon, MI*
- New Haven, MI*
- Orion, MI*
- Burnsville, MN
- Elk River, MN
- Glencoe, MN
- Houston, MS
- Kernersville, NC
- Bennington, NE
- Rochester, NH
- Virginia City, NV
- Boonville, NY
- Chaffee, NY
- Fairport, NY
- Lincoln, NY
- Rigas, NY
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- Morrisville, PA
- Newburg, PA
- Pen Argyl, PA
- Pine Grove, PA
- Taylor, PA
- Washington, PA
- Drummondville, QC
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- Heiskell, TN
- Aledo, TX
- Austin, TX
- Cleveland, TX
- Lewisville, TX
- New Braunfels, TX
- San Antonio, TX
- The Colony, TX
- Charles City, VA
- Gien, NY
- Hampton, VA
- Jetersville, VA
- King George, VA
- Waterbury, VT

* Indicates more than one location in the same town
New Landfill Gas Infrastructure
Our newest and most advanced RNG facility is located at our Skyline Landfill in Ferris, Texas. This new facility began injecting pipeline-quality gas into the Atmos Energy system in early 2020 and has the capacity to treat up to 5,000 standard cubic feet per minute of incoming landfill gas. This gas is extracted through an elaborate series of wells and pipes, then routed to the RNG facility, where CO₂ and nitrogen are removed.

New RNG facilities in progress include the East Oak Facility in Oklahoma City and the Sainte-Sophie Facility in Quebec, both existing landfills. Up to 20 projects are in early stages of development across the U.S. and Canada.

Making Landfills More Sustainable
Investments in technology are helping us continually reduce our landfills’ environmental impact. For example, predictive maintenance systems enable plant managers to develop more efficient operational practices. We have prototyped an automated gas wellhead for use at closed landfills, which monitors landfill gas levels with little interaction needed from technicians. This Connected Landfills system mitigates emissions that occur at closed landfills, while reducing the number of miles that technicians must travel on foot to monitor wellheads.

WM continues to explore ways to better measure, and therefore manage, fugitive landfill emissions. This issue has become increasingly important for our industry, and we are working with several technology providers and organizations, including NASA’s Jet Propulsion Laboratory, California Air Resources Board and Carbon Mapper, to tackle this complex challenge. Satellite imagery, aerial flights and on-the-ground sampling will inform and improve ongoing measurement. These technologies will bring a new perspective and offer insight into the location and concentration of emissions. Based on tools implemented to date, we are seeing promising results for leak detection and repair. We will continue to support research and studies on accurate ways to estimate and measure landfill emissions over time. Through these efforts, we expect to achieve our goal of developing a system for measuring fugitive emissions by our 2025 target date.

Fuel for Tomorrow
Take a tour of our new Skyline RNG Facility, where trucks are fueled with gas generated at our own landfill.
Fleet Emissions

Our fleet of 19,690 collection vehicles provides reliable, essential service to our customers while reducing our environmental impact.

By the end of 2020, 53% of WM’s collection fleet had been transitioned to compressed natural gas (CNG) vehicles, avoiding the use of millions of gallons of diesel fuel per year and comprising the largest heavy-duty natural gas fleet of its kind in North America. Over half of our CNG vehicles use dairy or landfill biogas, including gas captured from our own landfills. In California, Oregon and Washington, 100% of our natural gas fleet runs on RNG.

For every diesel-powered truck we replace with natural gas, we reduce our annual fuel use by an average of 8,000 gallons, an equivalent of 14 metric tons of GHG. CNG vehicles are quieter than diesel trucks and emit nearly zero particulate emissions, which helps improve air quality.

WM has invested $2.5 billion in CNG vehicles, and an additional $550 million in fueling infrastructure. Our goal is to create a near-zero-emissions fleet fueled almost entirely with renewable fuel. With these efforts in mind, WM is working toward a science-based target to cut fleet emissions by 45% by 2038, against a 2010 baseline. We are well on our way to achieving this goal, having already reduced collection and support fleet emissions by 43%. We’ve achieved these reductions through logistical efficiencies, transitioning to natural gas vehicles, and by increasing our use of renewable fuel.
Inside WM’s Natural Gas Fleet

Vehicles receive natural gas fuel through our network of WM owned and operated fueling stations. As of the end of 2020, we operated 171 natural gas fueling stations across North America, with 25 of these also open to the public. In the case of facilities like WM’s new Skyline RNG Facility, a natural gas fueling station was installed directly adjacent to where landfill gas is captured and processed, creating a closed loop through waste collection, conversion into energy and use as fuel for collection trucks.

Natural gas vehicles fueled with RNG offer many environmental benefits by reducing NOx emissions by as much as 97%, diesel particulate matter by as much as 94% and carbon dioxide equivalent emissions by as much as 80%, compared to the diesel vehicles they replace. The use of RNG also incentivizes improved management of existing waste streams, which can lead to water and air quality benefits beyond the production of RNG.

In 2019, we began using RNG captured from dairy and hog operations as an additional source of fuel. Converting waste manure to RNG is a win-win: it reduces methane emissions at a dairy farm and reduces vehicle emissions from trucks on the road. Dairy RNG also delivers a significantly lower carbon intensity than diesel or even landfill RNG, meaning that fewer emissions are associated with its production and consumption than other fuel types. In 2020, we established a third ultra-low-carbon-intensity dairy project, increasing the capacity to fuel our fleet with low-carbon fuel. WM is also piloting a project to use biodiesel where CNG fuel is not available or practical, allowing us to further reduce our fossil fuel-derived diesel use.

Improving the Efficiency of Our Network

Beyond using cleaner fuel, we are decreasing the amount of fuel we consume via logistics solutions, including route optimization technology that allows us to reach customers while traveling the shortest possible distance. Efficient routing translates into reduced fuel consumption and associated emissions, while also improving the quality of our service by limiting delays.

Credit for much of this progress goes to our WM Way initiative, which helps streamline routes. WM Way technology includes DriveCam®, a video recorder mounted on the windshield of collection vehicles that is automatically activated by sudden movements. Where appropriate, managers watch videos with drivers to coach them on safer and more fuel-efficient driving techniques, such as proper acceleration, deceleration and efficient speeds. We also use an anti-idling program to reduce fuel consumption. Through this program, all collection vehicles built after 1998 can program idle shutdown timers to five minutes, in accordance with the American Transportation Research Institute’s Compendium of Idling Regulations.

Driving Toward Zero Emissions

While RNG vehicles have helped us significantly reduce fleet emissions, we continue to look for ways to further reduce our impact. For example, while zero-emissions, battery-electric and hydrogen fuel cell electric vehicles are increasingly available for many passenger and commercial applications, weight limitations present a challenge for our heavy-duty collection trucks. Current battery technology requires these trucks to carry multiple batteries to complete their routes, which adds weight. Our Class 8 collection trucks are limited by legal weight limits on roadways that determine how much various types of trucks can carry. In order to carry enough battery power and comply with these limits, WM would need more trucks on the road to provide the same level of service.

These limitations, combined with the cost of the trucks to date, have been an impediment to the adoption of this technology. However, as battery technology continues to evolve, we expect electric vehicles to become more compatible with our needs.

WM is currently working with major domestic and international vehicle original equipment manufacturers to identify state-of-the-art zero-emissions truck and compaction technologies for our fleet. We began operating our first electric-powered collection truck in 2020 in Southern California, own and operate two electric delivery vehicles in Seattle, and are preparing to add three to five additional electric demonstration vehicles, including automated side loaders and a tractor, to our fleet at various locations nationwide in 2021.

Beyond these initial vehicles, we continue testing alternative energy collection and support vehicles from nearly every major manufacturer, working with them to provide feedback on truck performance. By experimenting with a broad range of solutions, we expect to find the technologies that allow us to be successful and ultimately operate with zero emissions in the communities we serve.
Facility Energy Use

WM seeks solutions to improve energy efficiency in our facilities by implementing a range of technologies and best practices that reduce environmental impacts, improve operational efficiencies and achieve cost savings.

For example, we are working with our energy solutions partner to increase the use of sources such as wind, solar, waste heat and landfill gas to power and heat many of our facilities. Our 2025 goal calls for the facilities we operate to use 100% renewable electricity.

WM also looks for opportunities to support renewable energy adoption by others. In 2020, we hosted 100 MWh of wind power at closed landfills. We also host solar electricity in support of U.S. EPA’s RE-Powering America’s Land initiative, which encourages renewable energy development on current and formerly contaminated lands, landfills and mine sites, when it is aligned with the community’s vision for the site.

Sustainability at WM Headquarters

New facilities are often built to meet the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) standards. For example, our new corporate headquarters in Houston, Texas, is certified LEED Platinum for the build-out of our office space, which includes use of low-emitting materials, advanced energy metering, indoor water use reduction, sustainably made furniture and optimization of energy performance. The building will offset 100% of its electricity consumption with renewable energy and is located near local metro lines and bus routes to encourage use of public transportation. For construction projects where we do not seek formal certification, we align closely with LEED standards.

WM Energy Mix

**Consumption of Fuel**
- 1,992,642 MWh from renewable sources
- 6,348,664 MWh from non-renewable sources
- **Total MWh**: 8,341,306

**Consumption of Purchased Electricity**
- 958 MWh from renewable sources
- 639,516 MWh from non-renewable sources
- **Total MWh**: 640,474

**Total Energy Consumption**
- 1,993,600 MWh from renewable sources
- 6,988,180 MWh from non-renewable sources
- **Total MWh**: 8,981,780
Community Engagement

In This Chapter:

• Overview
• Environmental Conservation
• Environmental Education
• Community Vitality
• Environmental Justice
The People Behind Our Progress:

Tej Kullar,
National Accounts Manager

As a National Accounts Manager at WM, Tej Kullar has long understood the importance of sustainable practices. When his daughter was born 10 years ago, he began thinking even more deeply about the role that each person can play in leaving the planet better than we found it.

WM’s Pledge to Plant campaign in 2021 gave Kullar a new opportunity to do more to preserve the environment at work and at home. For the campaign, Kullar pledged to better understand his own impact on the environment and educate others about how to live more sustainably, starting with small, everyday changes. The knowledge he shared with friends and family has caught on. Kullar’s daughter is now part of a green team that encourages recycling at her school. His friends have begun separating recycling and organics at gatherings.

He’s learned that every person can make a difference. Just like Kullar, WM team members across North America dedicate their time to educate family, friends, customers and neighbors about the importance of recycling right, the value behind conserving resources, and the impact their actions can have on the planet—and people—we all want to protect.
Overview

WM has a long history of supporting our communities and environmental stewardship through collaboration, community engagement and environmental impact.

We work with organizations such as the National Waste & Recycling Association, The Recycling Partnership, Wildlife Habitat Council, National Forest Foundation, Tree Canada, Feeding America, Food Banks Canada and Slow Factory, to foster relationships with supporters who educate key stakeholders on environmental initiatives critical to sustaining our social impact priorities.

With operations spanning North America, we strive to keep our cities, provinces and counties safe, resilient and sustainable—better places to work and live, today and in the future. To do so, we support events, programs and organizations that align with three focus areas:

- Environmental Conservation
- Environmental Education
- Community Vitality

WM hosted or supported 850 community events in 2020, which is lower than in years past, due to COVID-19.

How We Give Back

- ~15,000 protected acres of wildlife habitat
- $15.4M total charitable contributions (cash and in-kind donations)
- 3M+ meals donated through employee giving campaigns
- 50,000+ trees planted in public lands
- 57,565 community members participated in environmental stewardship and civic activities

1 The number of people we were able to reach through community events and educational activities was lower in 2020 than in years past due to COVID-19.
Environmental Conservation

For more than two decades, WM has enhanced and protected nearly 20,000 acres for wildlife in partnership with Wildlife Habitat Council (WHC), the authoritative conservation program for businesses.

Through this partnership of 20+ years, we transform land—primarily closed landfills and smaller buffer zones at transfer stations, recycling facilities and other facilities—into certified wildlife habitat. We currently promote sustainability, wildlife preservation, biodiversity and environmental education at 75 WHC-certified sites across North America.

**Why Habitat Protection Matters**

These sites are also vital educational spaces that bring science, technology, engineering and mathematics (STEM) to life to teach the next generation about environmental stewardship. All acres are overseen by WM employees and volunteers who dedicate their time and expertise to ongoing management and education. Through these sites, we teach the fundamentals of protecting habitat, natural ecosystems and biodiversity to neighbors and students who visit and spread the word about the importance of environmental responsibility. The programs also show visitors how landfills support their surrounding natural ecosystems. WHC recognized our corporate commitment to biodiversity and conservation education by awarding us their 2021 Corporate Conservation Leadership Award.

In addition to WHC programs, we also support the preservation of habitat for beneficial pollinators via the Highways Bettering the Economy and Environment Pollinator Protection Act (Highways BEE Act), a law to facilitate states’ efforts to use more pollinator-friendly highway landscaping practices. Today, WM has 63 programs dedicated to protecting pollinators throughout North America. This includes a program at Fairless Landfill in Morrisville, Pennsylvania, which is a WHC-certified hub for six community partners focused on pollinator protection. What began in 2013 with eight employees has grown to reach 2,093 employees, families, friends, students, teachers and community members. The program has retained certifications from the National Wildlife Federation, Monarch Watch, North American Butterfly Association and as a Pennsylvania State University pollinator garden. In addition, the program recently earned the 2021 Landscaped Project Award, Pollinator Project Award and Awareness and Engagement Award from WHC, and was named the Pennsbury School District Business Partner of the Year.

In addition to habitat conservation programs, our land serves other environmentally helpful purposes. As sections of our landfills close, the land can take on new life for a variety of beneficial purposes, such as recreation or solar farms. WM also leases more than 21,000 unused acres in the United States and Canada for productive use by farmers and ranchers.
Wildlife Habitat 2020 Site Highlights

Our 75 WHC-certified programs vary in scope from individual species management to large-scale habitat restoration. All projects are included in WHC’s Conservation Index, an interactive database that maps conservation projects worldwide. Here are a few WM sites that are making a difference for local wildlife and neighbors.

Plainfield Township, Pennsylvania

Grand Central Landfill is home to 210 acres of grassland habitat, walking trails and an environmental education center that offers programs on conservation, renewable energy, recycling, wildlife management and more. When the pandemic displaced local Girl Scout troops from their regular meeting locations, Grand Central offered its Environmental Education Center as a meeting place. The surrounding area was a perfect space for Scouts to learn about nature and take on projects such as planting a pollinator garden. Local conservation experts also led socially distanced summer butterfly walks to help guests better understand the life cycle of monarch butterflies. Thanks to their efforts, the Grand Central Team earned the Environmental Partnership award from the Pennsylvania Environmental Council.

Ottawa, Ontario

The West Carleton Environmental Centre is in the Carp River watershed, whose slow-moving, fresh waters provide habitat for the painted turtle and native and migratory birds. A WHC-certified site since 2006, the facility installed sunning logs and basking structures to provide protection and comfort for the painted turtles, their offspring and other wildlife. Turtle crossing signs across the site remind humans to watch out for any turtles. West Carleton’s most recent conservation work earned WHC’s 2020 Reptiles & Amphibians Project Award.

Morgan Hill, California

One could easily visit Kirby Canyon without realizing it was a landfill. Hidden in central California’s rolling hills, over 700 acres are set aside for landfill activities and 250 acres are habitat for the federally protected Bay checkerspot butterfly and several rare nectar plants. To encourage the reestablishment of the butterfly population, the team has worked with the Creekside Center for Earth Observation in the past to provide larvae to introduce to other sites. Hard work by the WM team keeps the grasslands and the butterfly protected against invasive species and non-native animals. WHC recognized the site’s conservation projects with a Gold Certification and their 2020 Grasslands Project Award.

Okeechobee, Florida

The Okeechobee Landfill is home to a 2,000-acre certified wildlife site where educational landfill tours, featuring visits to our pollinator garden, bat houses and barn owl boxes, promote awareness of wildlife habitats. Beyond the garden, the Okeechobee team partners with Arnold’s Wildlife Rehabilitation Center, a local nonprofit committed to the rescue, rehabilitation and return of recovered animals to their natural habitat. Last year, in one month’s time, 10 raccoons, eight opossums and four skunks were released and now call Okeechobee home.

Keenesburg, Colorado

Grassland bird populations and their habitat are in decline across much of the U.S. This makes Buffalo Ridge Landfill’s 4,460-acre short grass prairie a vital habitat for grassland birds like the lesser prairie chicken. Antelope, coyotes, the swift fox and the Massasauga rattlesnake also depend on grasslands as their primary habitat. Working to help protect various species, the site constructed brush and rock piles to provide cover for smaller animals and built perches as a refuge for grassland songbirds such as Colorado’s state bird, the lark bunting. The facility regularly offers tours so residents can learn how we create habitats for Colorado’s native species.

WM team members help protect pollinators via 63 programs, including one at Fairless Landfill, a WHC-certified hub for six community partners focused on pollinator protection.
Celebrating Earth Day with Sustainability Pledges

Annual Earth Day celebrations generate awareness and excitement around our commitment to sustainability. Linked to WM’s Commitments & Values programs, for Earth Day 2021, WM committed to planting a tree for every pledge received from an employee committing to live sustainably. More than 22,000 employee pledges were collected in the lead-up to Earth Day, including pledges to plant pollinator gardens at home, change to LED lightbulbs, conserve water and opt for reusable bags. At a Four Corners facility, team members created a tree out of paper and cardboard where team members could post their pledges and inspire others to join in. In honor of the impact the pledges will make, our Pledge to Plant campaign committed to planting 50,000 trees via the National Forest Foundation and Tree Canada. Seedlings will be planted in California and Colorado, where they will help regenerate areas affected by wildfires, and in Georgia, where they will support native species habitat restoration and insect and disease recovery.

Beyond making pledges, WM employees celebrated Earth Day by helping beautify their communities:

- Team members in Conroe, Texas, participated in a park cleanup, gathering 4,500 pounds of trash that was collected in Bagsters.
- Employees in western Pennsylvania partnered with a local artist to create virtual art projects with reusable materials.
- A team in Florida went on the local news to share how recycling right gives materials a second life.
- In New York Harbor, GMA team members joined the Billion Oyster Project in collecting oyster shells from Governor’s Island to rebuild reefs in the Jamaica Bay Wildlife Refuge.

The El Sobrante Landfill manages more than 640 acres for the benefit of two federally listed endangered species and 29 other species, including mammals, birds and wildflowers.
Environmental Education

Consumers want to recycle right—simplicity and convenience play an important role on the road to success.

As we move through our busy lives, it’s hard to keep track of what does or doesn’t belong in the recycling bin. That’s why WM created the Recycle Right program, the first national, comprehensive recycling education and outreach program built to provide open-source tools to help customers understand how to recycle properly.

How We Help People Recycle Right
We partner with states, cities and businesses across North America to broaden conversations and elevate understanding around the impact individual behavior can have in fostering sustainable consumption and production patterns.

Through resources, explanations of common recycling myths and concise lists of acceptable recycling materials, Recycle Right provides answers for residents, businesses, educators, property managers and government institutions seeking recycling know-how. Brochures, posters, decals, videos and other resources are all available for download as part of our toolkits. Plus, municipalities and commercial customers can take advantage of a free widget that directs consumers to our Recycle Right website. For educators, we created a standards-based, interactive learning recycling curriculum designed to align with the Next Generation Science Standards.

We regularly update the Recycle Right website with real-time information and solutions to help consumers recycle properly. For example, since plastic bags are not acceptable to recycle in commercial or curbside recycling programs, we developed a commercial, reusable recycling bag toolkit to provide businesses the necessary tools to train janitorial staff and employees to recycle without using plastic bags or liners. Similarly, we created a multifamily toolkit to help property managers and residents set up their recycling programs for success. With Recycle Right reusable tote bags, residents of multifamily properties can easily transport recyclables to their bins.

To keep Recycle Right messaging top of mind, our Canadian colleagues and neighbors celebrated Waste Reduction Week, leading up to America Recycles Day, by leveraging social media to share best practices on how to reduce waste. Insights focused on the circular economy, textiles, e-waste, plastics, food waste and other key components of recycling right and living sustainably.

Powering Through the Pandemic
WM typically receives hundreds of requests from schools to teach children the value of recycling. While the pandemic presented challenges to meeting these requests, our Pacific Northwest recycling educators quickly found a new way to engage youth around sustainability from home. Through interactive virtual programming, WM guided students through quizzes and exercises during which they learned the basics of recycling and environmental protection. WM has facilitated 1,400 classroom workshops and 220 school assemblies since 2012 in Snohomish and Spokane counties in Washington state, and led 115 virtual workshops in 2020. According to one teacher, WM’s programming was “the best part of our day!”

Other virtual events included video tours of our Sacramento, California, MRF and composting facility, a tour of our new Salt Lake City, Utah, MRF in partnership with the Sustainable Packaging Coalition, and a Recycle Right video contest.

8.5M people reached annually through digital communication campaigns

8.5M people reached annually through digital communication campaigns
why plastic bags cause problems for curbside recycling programs. These resources were particularly important for customers during stay-at-home orders, which increased waste volumes and made recycling right and reducing contamination more important than ever.

**Reimagining the Value of Waste**

In line with our interest in creating a circular economy and finding new uses for a variety of materials, including textiles, WM is helping to inspire emerging fashion designers to consider a garment’s end of life before its life begins. In 2019, WM worked with Slow Factory, a public service organization that works at the intersection of climate and culture, to launch a Landfills as Museums initiative. Landfills as Museums invited designers, students and activists to tour a landfill to learn what kinds of materials are present, before encouraging them to consider how waste can be incorporated into the product design process. We are furthering our collaboration with Slow Factory through the WM Design Challenge, whose participants’ work will be showcased at the 2022 WM Sustainability Forum. Slow Factory is also helping to identify speakers and students to participate in Together Today, For Tomorrow, a web series of virtual conversations that will feature up-and-coming leaders in sustainability.

**Local Giving for Environmental Education**

WM helps educate neighbors and communities with local grants that organizations can use to amplify their programs. In 2020, a grant to King George Family YMCA helped fund a social responsibility program to teach more than 700 K-5 students to become recycling ambassadors. WM also awarded a grant to the City of Tampa Department of Solid Waste & Environmental Program Management to strengthen its recycling education campaign, with a specific focus on reducing contamination. The impact of these grants will last long beyond the programs themselves, through young recycling ambassadors and sustainability stewards who will improve communities for decades to come.
Community Vitality

Beyond providing an essential service to neighborhoods and businesses, WM is committed to making our hometowns safe, resilient and sustainable places to live by contributing to communities in a number of valuable ways.

Focusing on Hunger Relief
In 2020, the issue of food insecurity became more dire than ever as business closures and layoffs led millions of people to wonder where their next meal would come from. WM and our employees responded to this crisis by making hunger relief a priority throughout the year. At the onset of the pandemic, we launched our Million Meals Campaign, which helped our partners, Feeding America and Food Banks Canada, provide meals to communities across North America through employee contributions and a company match.

As the year went on and the pandemic continued to impact individuals and families across our service areas, we launched a second program, A Can if You Can. Over two weeks, WM matched $1 per can and $1 for each dollar donated by employees, up to $50,000. These programs represent our team members’ ongoing efforts to put thousands of drivers to recognize and handle situations that don’t seem right. Program participants learn to properly observe and report suspicious activities and emergencies to local public safety and law enforcement agencies.

To become a Waste Watch-certified driver, an employee must complete a formal training program, which includes instruction from WM corporate security and local law enforcement personnel, and a written exam. The Waste Watch program has received national acclaim, earning recognition from local municipalities and the National Sheriffs’ Association’s Award of Excellence in Neighborhood Watch. Our drivers have been lauded for reporting suspicious activity ranging from thefts to vandalism.

Recent Waste Watch heroes include:
• Robert Riley of Tampa, Florida, noticed a toddler wandering alone in a park a short distance from his truck and waited to see if a parent or guardian would appear. When none did, he checked on the boy and called 911, allowing him to be reunited with his family. The Florida Department of Law Enforcement named Riley its “Florida Missing Children’s Day Citizen of the Year” for his actions. Later that month, Riley helped an elderly man who had fallen on a sidewalk. He was recognized by the Hillsborough County Board of County Commissioners for his acts of kindness.

People First. Combined, the WM family provided over 3 million meals for people experiencing food insecurity in 2020.

Helping Hungry Neighbors
In addition, local WM teams organized hunger relief campaigns in their own backyards. For example, teams in Brevard, Martin, Pinellas and Collier counties, Florida; and the South Bronx, New York; collected canned goods and produce for distribution to local food banks and nonprofits. WM facilities, including Grand Central Hauling in Pennsylvania and Varick Transfer Station in Brooklyn, New York, provided space for food collection events and distribution. In Northern California, WM donated a 40-yard cardboard-only bin to the local Salvation Army, which was struggling to dispose of the packaging it was generating from an increased number of food donations. Because of WM’s partnership, the charity was able to focus its resources on serving more people.

In our Four Corners market area, many operating sites adopted nonprofits for the holidays, collecting in-kind items and monetary donations. By coming together, the team purchased or collected 4,226 pounds of food and provided 49,650 meals.

WM’s Waste Watch Heroes
When WM drivers are on their routes, they become trusted eyes and ears on the streets. For more than a decade, our Waste Watch® program has trained
Community Engagement

- Drivers Sam Vaughan and Andrew Hubar noticed a man bleeding on the sidewalk in an Edmonton, Alberta, neighborhood they serve and stopped to help deliver first aid. They then waited with the man until further assistance arrived. A neighbor wrote to thank the drivers: “I wanted to make sure WM became aware to properly recognize these men—they did a great job and deserve praise for their professionalism.”
- Alex Keys, a driver and veteran volunteer firefighter, detected smoke while traveling back to the Green Ridge Landfill in Fort Edward, New York. He spotted a house with flames shooting out of the upstairs window and immediately pulled his truck over. After pounding on the door, he and another truck driver called 911 and got all of the occupants out while the fire department was on the way.

In addition to Waste Watch, we partner with safety-related organizations and programs, including AMBER Alert, the National Center for Missing & Exploited Children, Community Crime Stoppers and the U.S. Department of Homeland Security.

Employee Volunteerism
We pride ourselves on having an employee base that gives back to communities through volunteerism. In 2020, WM employees documented nearly 962 volunteer hours during paid working hours, while many others gave of their free time. Here are a few of the hundreds of examples of WM employees supporting their communities, even during a pandemic:
- Providing drivers and roll-off containers to pick up 267,000 wreaths delivered to Arlington National Cemetery after the annual Wreath Laying Ceremony. This was WM’s 15th year participating in this event.
- Delivering more than 3,000 meals to seniors and first responders who were treating COVID-19 patients.
- Purchasing and assembling bikes for local children in Pinellas County, Florida.

- Partnering with the Perkiomen Creek Watershed Association on cleanup projects that removed 150 cubic yards of litter and debris.
- Cleaning out damaged homes and neighborhoods after a flood.
- Donating new toys to support Marine Corps Toys for Tots.
- Repairing and rehabilitating houses for homeowners in need.

The WM Employees Care Fund
The WM Employees Care Fund, Inc. is a public, nonprofit 501(c)(3) organization that provides short-term financial assistance to WM employees during unexpected financial hardships and emergencies.

In 2020, the Fund assisted employees impacted by natural disasters and other circumstances, as well as making disbursements to families of employees who passed away. In general, the Fund disburses 100% of contributions to meet needs, pays no administrative expenses and carries limited reserves. The vast majority of the fund is supported directly by WM employees and is one example of how we support and take care of each other in times of need.

Corporate Charitable Donations
Whenever possible, WM engages with local stakeholders to understand how to support specific community needs. We give back to communities throughout the U.S. and Canada through financial contributions, in-kind giving, participation on organization boards and by sharing our expertise.

After the extraordinary devastation caused by hurricanes in the fall of 2017, WM donated $3 million to Hurricane Harvey aid relief and $1 million to Hurricane Irma recovery efforts. In 2020, our giving decreased slightly due to COVID-19-related restrictions.

Local Economic Impact
Our day-to-day operations—from the wages and benefits we provide, to the income taxes we pay in the U.S. and Canada—boost economic growth in the communities in which we operate. Supporting small and diverse businesses through the materials and services we purchase also contributes to local and national economic growth. In 2020, we spent $244.2 million with diverse suppliers, and we have set a goal to achieve 10% growth in diverse suppliers by 2038.

Charitable Donations ($ in millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
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<td>$13.0</td>
<td>$14.8</td>
<td>$14.2</td>
</tr>
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In-Kind Services Donated ($ in millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<tr>
<td>Value</td>
<td>1.9</td>
<td>1.9</td>
<td>1.6</td>
<td>1.2</td>
</tr>
</tbody>
</table>

1 The number of people we were able to reach through community events and educational activities was lower in 2020 than in years past due to COVID-19.
Environmental Justice

WM strives to be a good neighbor in the communities in which we operate.

This includes considering matters of environmental justice (EJ), which the U.S. EPA defines as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies."

Over the past several decades, we have worked closely with the U.S. EPA and other stakeholders in developing EJ tools, including the EJSCREEN tool. EJSCREEN uses nationally consistent data to identify and quantify factors related to demographic indicators and environmental quality and health. WM is the only company in our industry to publish information about our sites using this tool. See all of our facilities.

States and municipalities are increasingly adopting requirements for EJ reviews as part of permitting decisions. These policies generally require agencies to examine the potential for projects to disproportionately impact low-income and minority communities. WM supports policies that advance high standards of environmental performance and the fair treatment of people of all races, cultures and incomes.

Recognizing the increased focus on EJ, WM is marshalling experience from our existing best practice programs that have been implemented in communities across the country to develop a comprehensive, enterprise-wide program. Through the development and oversight of an Advisory Council, sharing of best practices throughout the company and the use of data through EJSCREEN, WM is developing programs to maintain a leadership role in our ongoing efforts to create an inclusive and equitable EJ program.

Learn more about our progress toward specific SDG targets in our ESG Resource Hub.
When WM first proposed building a recycling facility at Sun Valley Recycling Park, we were met with significant resistance from community members who were living with the impacts not only of WM’s existing landfill operations, but the cumulative impacts of power plants, junkyards and other industrial operations in the area.

Doug Corcoran, Area Director, understood the community’s concerns. “As I drove around the area, I began to see the project from the community’s point of view,” he says. “I had a mindset shift. It completely transformed how I approached the project.”

WM helped form a Citizens Council for members of the Sun Valley community and provided $500,000 in seed funding for the council to hire consultants and review the project plan. Our staff also attended more than 1,000 community meetings over the course of several years.

While WM funded this effort, we did not have control over the outcome. The community was largely supportive of the final project, and we were able to meet many of their requests, including designing the Recycling Park to avoid emissions and dust, and operating a fleet of all clean-fuel vehicles at the facility. In addition, we support a community fund for local programs on health care, environmental improvements and EJ education, and host free “dump days” to encourage local residents to properly dispose of waste. We also give preferential employment to residents of the Sun Valley—La Tuna Canyon Planning Area.

Engaging with the community changed the Sun Valley facility’s final design and transformed how WM thinks about EJ. Aspects of our approach, such as the formation of the Citizens Council, may be applied to future projects. “WM has an impact on our communities, whether we see it or not,” Corcoran says. “To truly address these impacts, we have to talk to members of our communities one on one.

“Being part of this project is an experience I’ll never forget.” Read more about WM’s Sun Valley Recycling Park.
Environmental Services

In This Chapter:

• Overview
• Recycling
• Organics
• Landfills
• Emergency Response Services
• WM Sustainability Services
The People Behind Our Progress:

Jennifer King, Driver

Jennifer King has set two major goals in her career: first, becoming a truck driver. And second, making people smile.

When I was a little girl, my dad had big trucks. From a young age, I fell in love with trucks too.”

King achieved her first goal more than 20 years ago when she received her commercial driver’s license. She was one of only a few women drivers in the industry and spent over a decade driving buses and delivery trucks. When King and her husband moved to Southern California and she saw an open driver position at WM, she jumped at the chance. Five years later, she’s reached both of her goals: driving the biggest, coolest trucks while bringing joy to her customers every day.

As a residential collection driver, King makes between 1,100 and 1,400 stops on her route each day. “That might seem like a lot, but for me, it’s 1,100 opportunities to connect with my customers,” she says.

King is always thinking of new ways to spread cheer along her route. “One Christmas, I put on a Santa hat and gave a candy cane to everyone I saw.” She loved the reaction from her customers so much that she started carrying lollipops on her routes every day, handing them out to kids and adults alike. She’s also made stopping for short conversations and photos with kids part of her daily routine.

When new families move into the neighborhoods on her route, she stops to teach them how to recycle their moving boxes at the curb. She takes her role as an environmental ambassador seriously, patiently answering her customers’ questions about how to recycle right.

King hopes these interactions will set a positive example for kids starting to think about their own careers. “Hopefully one day they’ll say, ‘I want to be like her. I want to help people smile,’” she says.

“Every day is a chance to put a smile on someone’s face, and that’s what makes me excited about tomorrow.”
Overview

Waste is an inevitable byproduct of everyday life. And while waste can be a problem if it’s handled improperly, end-of-life materials can also be a source of new value. As the leading environmental service and solutions company in North America, WM’s role is to help customers dispose of the waste they generate in the most environmentally responsible and valuable ways possible. We serve residential customers, small businesses, large corporations, manufacturing companies, universities and large public venues by collecting, transporting and finding new uses for the waste they generate. In addition, we offer consulting services that help customers waste less and operate more sustainably.

WM Services and Solutions

- Collecting trash, recycling and organic waste from homes and businesses.
- Operating materials recovery facilities (MRFs) where materials like paper, metal, glass and some plastics are sorted to be transformed into new goods.
- Operating organics processing facilities where food and yard waste are converted into compost and energy.
- Operating landfills where, in many cases, the gas generated by decomposing waste is processed into renewable energy.
- Safely handling specialized waste streams, like fly ash, electronics and industrial and medical waste.
- Evaluating reduction and recycling service options and managing customers’ programs on site through WM Sustainability Services.
- Helping sports stadiums and other large event venues divert waste and operate more sustainably.
- Developing new programs and solutions for textile recycling.
- Educating customers on ways to reduce waste and recycle right.
- Developing and promoting new markets for recycled materials.
- Offering temporary dumpster rental and business waste compaction services.

To help us push the envelope, our supply chain team has internal sustainability goals to create innovative partnerships with vendors and tracks the associated spend in our ESG Data Center. Our customers’ expectations for efficiency and convenience are changing, so WM is investing in technology to meet their needs. This list will continue to evolve and grow as we increase the solutions available to our customers.

Technology to Streamline Customer Solutions

The pandemic has also proven the value of our investments in CSD. During a time when businesses experienced unprecedented disruptions, waste volumes shifted from commercial toward residential settings, and many customers transitioned rapidly to remote work, the ability to connect with WM anytime, anywhere was essential. This period of disruption created an opportunity for us to change business processes for the better, and WM will continue to seek new ways to work more efficiently to better serve our customers. Details on WM Customer Service and Satisfaction can be found in our ESG Resource Hub.
Recycling

WM manages more post-consumer recyclables than any other company in North America.

The types of materials we manage are changing constantly as a result of consumer behavior, education around recycling, disruptions such as the pandemic and legislation in the U.S. and abroad. For example, China’s prohibitions on imports of certain materials, more stringent contamination limits and a ban on imports of all recyclables, which took effect in 2021, have had ripple effects across the globe.

The recycling community has adjusted to this new reality, with new end markets for post-consumer materials creating increased demand. In 2021, plastics including #1 polyethylene terephthalate (PET), which is used to make water and soda bottles; #2 high-density polyethylene (HDPE), used in milk and juice jugs; and #5 polypropylene (PP), used in materials like yogurt cups and margarine tubs, became some of the most valuable commodities we sell, with natural HDPE reaching a record high.

What We Recycled in 2020 (in tons)

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Recycled (in tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>7,744,197</td>
</tr>
<tr>
<td>Mixed organics</td>
<td>3,358,832</td>
</tr>
<tr>
<td>C&amp;D/wood</td>
<td>1,381,865</td>
</tr>
<tr>
<td>Fly ash</td>
<td>996,799</td>
</tr>
<tr>
<td>Glass</td>
<td>615,853</td>
</tr>
<tr>
<td>Plastic</td>
<td>502,459</td>
</tr>
<tr>
<td>Metal</td>
<td>384,404</td>
</tr>
<tr>
<td>E-waste/lamps</td>
<td>32,122</td>
</tr>
<tr>
<td>Oil</td>
<td>14,123</td>
</tr>
<tr>
<td>Total materials</td>
<td>15,030,654</td>
</tr>
</tbody>
</table>

In 2020, we recycled 13.5% of all materials handled, up from 12.9% in 2019. See the Operations section of our Data Center for year-over-year tonnage by commodity type.
All of the residential plastic we collect for recycling is now sold to markets in North America and is recycled in North America. We focus our efforts on recycling materials with responsible end markets while educating consumers on what materials can and cannot be recycled. Cardboard and paper make up approximately 60% of the material processed at our single-stream MRFs, and the opening of new paper mills that rely on recycled inputs has created more domestic recycling opportunities. These changes give us reason to be optimistic about sustainable recycling in the future. WM has made record investments in new recycling infrastructure equipped with technology designed to reduce contamination.

Managing Recyclables Responsibly
What does it mean to manage materials responsibly? First, it requires an understanding of what recycling truly means. Recycling is not just what happens when a consumer places an item in a curbside bin, nor when materials are sorted and processed by WM. The cycle is only complete when a material is converted into a new product to be used again.

Because this process includes multiple steps, there are multiple opportunities for things to go wrong. For example, consumers could forget to clean and dry their recyclables, or they could place unsuitable items in their bins. As a result, MRFs may have trouble sorting materials correctly and efficiently. Even if a material is sorted and baled, if it lacks a robust end market, there may be no one to purchase it, and it may still end up in a landfill.
Each of these challenges requires distinct solutions. WM is tackling issues at all levels—educating consumers to shape behavior, investing in advanced sorting technologies and infrastructure, and developing end-market demand that allows recycled materials to reenter the value chain by purchasing products made with post-consumer recyclables. Overseeing our efforts is a recycling Center of Expertise, made up of leaders from WM’s marketing, MRF operations and public-sector teams. This cross-functional group of experts meets monthly to exchange ideas, track progress on recycling-related programs and align on priorities, such as responding to changing market dynamics, limiting inbound contamination and developing WM team members as recycling ambassadors.

Changing Consumer Behavior
While individual and business behaviors have largely shifted to embrace recycling, many misconceptions remain around which materials can and cannot be recycled. Customer confusion leads to contamination, or unacceptable items being mixed with recyclables. While contamination is an ongoing challenge, we are making steady progress to address it. One of the most important ways we are doing this is by educating consumers on the right way to recycle through our Recycle Right program. In addition, we are making investments in multiple forms of technology and training within our collection and processing operations.

Smart Truck℠
One promising initiative WM has developed to reduce contamination is our Smart Truck℠ technology, where cameras mounted on collection trucks take photos of contamination in bins. Photos are then reviewed by a Smart Truck℠ team, and customers are directly notified of any issues. These instances are recorded on the truck’s onboard computer so that WM can track contamination patterns using AI technology. Our research confirms that giving customers immediate, specific feedback about contamination in their carts is the best way to improve the quality of recyclables collected for processing.

As an example, in 2019, when a fleet of commercial trucks in Northern California was outfitted with Smart Truck℠ technology, contamination among customers served by those trucks decreased 89% within three months. We are beginning to pilot Smart Truck℠ among our residential customers. When we encounter contamination in these customers’ bins, we encourage behavioral change through cart tags, photos and other outreach methods.

### 3 Ways WM Supports the Recycling Market

- Educating consumers about proper recycling practices
- Investing in advanced sorting technologies and infrastructure
- Driving end-market demand for post-consumer material

Environmental Services

89% decrease in contamination after Smart Truck℠ pilot
Driver Recycling Education
WM collection truck drivers are critical players in helping us solve the problem of contamination. We educate drivers and introduce them to the basic rules of Recycle Right through a Guide to Contamination and a Recycling FAQ. The FAQ is designed to help drivers identify problem materials and to accurately answer common customer questions.

On a regular basis, we conduct surveys to assess drivers’ recycling knowledge and understanding of common contaminants on routes. The results of these surveys allow us to target educational materials around a problem contaminant or address barriers that prevent drivers from identifying and tagging contamination. Before we roll out a new tagging and enforcement campaign, we use training videos—posted on our intranet and available in English and Spanish—to ensure that drivers know how to correctly identify and report contamination.

Reducing inbound contamination takes everyone’s help. Our efforts have helped reduce contamination levels at our recycling facilities to 16% at the end of 2020. This contributes significantly to our goal of reducing inbound contamination across all of our MRFs, excluding construction & demolition (C&D), to no more than 10% by 2025.
Developing Recycling Infrastructure

Beyond reducing contamination at the source, we are enhancing recycled material quality by improving technology within our MRFs. Over the past three years, WM has invested over $100 million per year in our recycling infrastructure, resulting in the construction of five new MRFs and upgraded equipment at 26 facilities. These new and improved facilities have boosted recycling efficiency and quality. Based on our success at these facilities, we plan to retrofit, upgrade or construct new facilities across our fleet of MRFs. Each facility will be highly automated based on the typical material composition in that market, expected volumes and the types of recycled materials we plan to sell there. The result will be more materials processed to higher levels of quality. Recently updated facility locations include:

📍 Chicago, Illinois
The “MRF of the Future,” completed in 2019, is designed to process almost 250,000 tons of recyclables per year and has become a blueprint for other state-of-the-art facilities. The facility’s design includes advanced screening technology and integrated optical sorters that meet the needs of today’s recycling stream, including improved sortation of glass and plastic. As a result, we are able to meet or exceed our end-buyers’ quality requirements, and have the flexibility to modify our processing based on product or specification.

📍 Morrisville, North Carolina
WM’s newest recycling facility, completed in December 2020, is designed to process residential and commercial recyclables, producing high-quality outbound bales of feedstock for the manufacturing industry. The $11 million facility is capable of processing 80,000 tons of recyclables per year.

📍 San Leandro, California
The San Francisco Bay Area is committed to being a leader in environmental protection. As a result of the city’s commitment, and state regulations incentivizing recovery of recyclables and organics, WM has invested in a revolutionary back-end solution for extracting recyclables and organics from residual waste at the Davis Street Recovery Facility. The facility can process 300,000 tons of waste each year, diverting 80% of organics and 90% of recyclables in the waste stream that would otherwise have gone to a landfill. The facility also relies on solar energy for 69% of its electricity use, further increasing the site’s environmental benefits.

📍 Sun Valley, California
WM’s Sun Valley Recycling Center opened in 2020 after a decade of planning, permitting, construction and dialogue with local stakeholders. The facility has capacity to handle each of WM’s major waste streams—recycling, organics and residual waste destined for landfills. Five hundred tons of recyclables can be sorted per day by the facility’s advanced sortation equipment. Organics are processed using a first-of-its-kind organics extraction and recycling system, and remaining wastes are transferred to landfills near Los Angeles for disposal.

📍 Salt Lake City, Utah
WM’s Salt Lake City MRF was completed in 2020 to support the needs of the state’s growing population. Designed for maximum efficiency, it includes equipment with advanced automation capabilities and sorting optics, innovative film screens and ballistic 3D motion separators. The 50,000-square-foot facility is designed to process 125,000 tons of material each year.

Overall recycling volumes decreased in 2020, due primarily to reduced activity in the commercial and industrial sectors during the pandemic. However, WM continued recycling even when commercial businesses were closed, providing material for paper mills and other facilities to produce packaging for essential consumer products.
An Unprecedented Investment in Infrastructure

WM’s capital improvement plan for recycling anticipates that 95% of our MRFs will be equipped with state-of-the-art processing technology by 2023. These facilities are designed with the changing waste stream in mind. While older MRFs were built to primarily process paper grades, newer facilities are made to accommodate increasing volumes of plastic. Here are a few of the cutting-edge technologies at work at many of our MRFs across the country.

**Optical Sorters**
Optical sorters analyze materials moving along a conveyor belt, then use a stream of air to remove recyclable items at a rate of up to 600 pieces per minute.

**Robotics**
Robotics provide quality control, picking out additional materials that optical sorters may miss.

**Intelligent Sorting**
Intelligent sorting enables communication between all pieces of equipment in a MRF, which helps improve material quality and eliminate downtime.

**Volumetric Scanners**
Volumetric scanners evaluate how much material is distributed throughout a facility and adjust to prevent a system from being overloaded.

**Cameras**
Cameras identify contamination as soon as materials land on a MRF’s tipping floor, allowing us to quickly notify customers of any issues and remove the offending materials.

**Fire Suppression Technology**
Fire suppression technology detects fire or smoke that results from flammable materials that sometimes enter the recycling stream and, if needed, deploys a foam cannon to put out flames.

Creating Demand for Recyclables

As part of our commitment to supporting sustainable demand for recyclables, WM committed to the Association of Plastics Recyclers (APR) Demand Champion Program, pledging to increase the use of post-consumer resin (PCR) in products we purchase, starting with our residential carts. We partnered with Cascade Engineering to test and purchase EcoCarts, which are made with 10% PCR. This innovation helped earn a Design for Recycling Award from the Institute of Scrap Recycling Industries in 2021.

Expanding upon this, in 2021 WM announced the nationwide debut of employee uniforms made from recycled PET plastic. One of the largest purchasers of PET from WM’s MRFs is Unifi, a company that uses PET to create a textile fiber known as REPREVE. Together, WM and Unifi have recycled more than 20 billion bottles into new products such as shoes, clothing and bags. These garments will be available to over 20,000 WM drivers, helpers and post-collection employees in 2021.

Making Clothing Circular
We are working to develop a promising new market—the recycling of end-of-life textiles. According to the U.S. EPA, only 14.7% of used textiles are donated or recycled today. The rest are sent to landfills, due to a lack of convenient options for consumers, as well as a lack of awareness regarding the textile industry’s environmental impact.

This represents an opportunity for WM. Our existing collection and processing capabilities could potentially be adapted to the needs of textile recycling. WM’s
Corporate Development & Innovation (CD&I) group built internal teams, assembled a portfolio of supply chain partners and tested the market through a variety of pilots to help encourage the growth of end markets for post-consumer textiles.

We’ve helped customers develop programs and solutions for recycling uniforms at end of use, including upcycling uniforms into different products and de-branding them for sale in new markets. Three municipalities now use WM’s Tracker mail-back program to manage the certified destruction and recycling into new fiber of their uniform apparel. WM is also a founding member of EON’s ConnectFashion initiative, a collaborative partnership that could help further improve the management of textile waste.

**Emerging Sources of Demand**

Over the past several years, domestic markets for many materials collected in curbside recycling programs have grown. This has helped stabilize recycling across the country.

**Paper**

One type of material that has seen robust end-market demand is post-consumer paper, or more specifically cardboard and mixed paper. Our reliance on these materials became clear during the pandemic.

U.S. paper mills rely on recyclable paper to make the products and packages we rely on every day. Without this supply, these mills could not produce the tissues, paper towels and cardboard packaging for medical and grocery items that have been essential to fighting the virus and keeping individuals safe at home. WM worked with regulators and municipal customers to emphasize the importance of maintaining this critical supply chain, and with mill customers to ensure the supply of clean, recyclable materials to manufacture key products throughout the pandemic.

**Plastic**

As the economy began to recover from COVID-19, the markets for many types of plastics began to improve. This is primarily due to the commitments that manufacturers have made to using post-consumer content in their packaging. By mid-2021, pricing for #1 PET (water and soda bottles), #2 HDPE (milk jugs) and #5 PP (yogurt and cottage cheese containers) reached an all time high. Demand for these materials exceeded the supply of material collected for recycling. These robust market conditions have supported significant investments in recycling infrastructure, further strengthening recycling programs in North America.

Legislation can also help drive demand for other types of recycled materials. At the 2020 America Recycles Summit, the U.S. EPA announced a goal of increasing the national recycling rate to 50% by 2030, recognizing the importance of strengthening the markets for recycled materials in achieving this objective. Many states are considering minimum recycled content laws for certain products, which will further encourage businesses to make the shift.
Organics

Food waste, yard trimmings and other organics make up over a third of the material, by weight, that we manage for our customers. Wasted food is a major economic and environmental challenge across the globe.

In the U.S. alone, more than 75 billion pounds of food is wasted each year, and displaced food carries a price tag of well over $161 billion. The U.S. EPA estimates that more food reaches landfills and incinerators than any other single material in our everyday trash, making up 24% of the disposed waste stream. And when factoring in the energy used to grow, process and ship food, as well as the emissions released when it decomposes, food waste adds billions of tons of GHG emissions to the atmosphere.

While the concept of a circular economy is most often applied to manufactured goods, it also applies to organics, including food. The benefits of managing food and yard waste at end of life are significant—and businesses and governments are taking action. In California, SB 1383 aims to divert the majority of organic waste from landfills and increase the recovery of edible food for people in need by 2025.

Where possible, WM helps prevent food from being wasted and encourages its redistribution through local food donation programs. For other organic material, we continue to invest in new or expanded programs for handling at end of life. Although the pandemic significantly slowed or halted food waste programs and municipal project development related to organic waste, WM continued to invest in new organics processing capabilities to meet our customers’ needs.

Food Donation

Preventing food waste upstream benefits the environment in terms of emissions reduction and helps communities in need by providing nutrition that would otherwise go unused. When possible, WM works with companies and municipalities to donate unused food to food banks before it gets thrown away. Throughout the pandemic, we also stepped up our efforts to address food insecurity through our Million Meals match campaign, our A Can if You Can program, as well as dozens of events supporting local communities across the country.

Turning Food Waste into Energy

Food that is no longer suitable for human or animal consumption can become a source of renewable energy. Through CORE®, WM’s proprietary organics recycling process, food waste from residential, commercial and industrial sources such as grocery stores, municipalities, schools, event spaces and food manufacturing is collected and screened to remove contaminants, such as plastic and packaging, before it is blended into an engineered slurry. The slurry is injected into treatment facility digesters in existing wastewater treatment infrastructure. This process increases the biogas produced by the digester by as much as 200% without notably increasing its residual digestate. This gas can then be used as a renewable power source, enabling municipal customers to produce heat and power from their own
Compost as a Soil Amendment Solution

Composting and mulching are proven, low-cost solutions for managing large volumes of organic materials, particularly yard waste. WM has 38 facilities that process organic material into compost and mulch, as well as new organic solutions developed in collaboration with customers. Compost products are used to improve soil structure and quality by supplying macro- and micronutrients and beneficial microflora. The high amount of organic matter in compost also increases soils’ capacity to hold water. This is particularly important in areas where drought conditions make water an especially precious resource. Much like the recycling process, WM’s composting services help create a closed loop: food and yard waste becomes compost, which in turn helps feed the next season’s crops.

We process yard waste and food waste into compost using a variety of methods including the windrow method and the covered aerated static pile (CASP) method. The method chosen is based on permitting, space, cost, climate and other variables.

Inside a Windrow Compost Facility

Food and yard scraps are transformed into a mixture that resembles rich, dark soil, ready to deliver to customers. Here’s how the process unfolds.

Yard waste and food waste arrive in commingled form, from a variety of sources including commercial, residential, municipal and industrial customers.

After sorting to remove contaminants, the organic material is formed into long piles, called windrows, which generate heat as microorganisms break down the organic matter.

Machinery turns and mixes the piles, incorporating air that helps in the decomposition process. Temperature and moisture are carefully monitored, ensuring that the natural process can unfold regardless of weather conditions.

The compost is passed through screens that create a product with a consistent particle size.

Another example of food waste being converted to energy is at WM’s Sun Valley Recycling Park in Los Angeles, which includes a municipal solid waste (MSW) transfer station and a MRF with organics processing capabilities. There, WM partners with Anaergia, a company that has developed a process for separating food and other organics from nondigestible material collected from commercial and multifamily facilities. After an extrusion process, the “wet fraction” is transported to a digester where it can be converted into renewable energy and fertilizer products, including renewable natural gas. Meanwhile, leftover solids will be recycled, and Anaergia is planning to use a process called pyrolysis, where these solids are dried and broken down under high heat. The resulting material is biochar, which can be used in agricultural applications. The Sun Valley facility can extract up to 450 tons of organic waste every day.

Due to the pandemic, many municipalities temporarily suspended their residential organics services. While this affected WM’s CORE® facilities in 2020, we are beginning to see a resurgence of these programs in 2021.

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Much of the food and yard waste WM collects from homes and businesses eventually becomes compost, which can be applied to farm fields and landscaping to increase the health of soils. See the many ways the organics we collect take on a new life.

**Willow Ranch Compost Facility**
Scotts Miracle-Gro produces soil amendments for lawns and gardens under a number of brand names. WM’s Willow Ranch Landscape Waste Facility provides some 70,000 yards of compost to two Scotts facilities in northern Illinois every year. Willow Ranch’s compost is listed by the Organic Materials Review Institute (OMRI) and is screened to Scotts Miracle-Gro’s precise specifications. WM is a major supplier for the company’s Performance Organics brand of soil.

**Glanbrook Composting Facility**
In Hamilton, Ontario, WM operates the Glanbrook Composting Facility. Yard waste from the city’s curbside collection program is delivered to the composting facility, where it begins the process of transformation into compost. As part of our agreement with the city, we make 10% of our finished compost available for use in municipal projects, like community gardens and compost giveaway events.

**Central Valley Compost Facility**
Beyond growing crops, certain types of soil can be used to manage stormwater by filtering out pollutants that can harm ecosystems. To do this job properly, soils must be blended with ingredients like sand and clay, while including enough nutrients for plants to grow. WM’s Central Valley Compost Facility supplies compost so that customer NorCal Ag Service can do exactly that. NorCal’s bioretention soils are used in low-impact development projects throughout the Bay Area. See more about how our compost is used as a soil amendment by organics farmers.

**Okeechobee Compost Facility**
In central Florida, high-quality compost is in demand from the region’s citrus groves. Compost from WM’s Okeechobee Compost Facility has high organic matter, helps boost crop production and reduces the impact of citrus greening disease. The Okeechobee Facility also creates a niche product specifically for use on golf courses. The facility, which opened in 2012, can produce up to 10,000 cubic yards of mature compost each year.

**Strathmore Compost Facility**
In Alberta, Canada, WM’s Strathmore Compost Facility and Eagle Lake Professional Landscape Supply have a mutually beneficial relationship. Strathmore converts green waste and food waste into mature compost that Eagle Lake uses to develop soil blends for its professional landscaping customers. At its distribution site in Calgary, Eagle Lake collects its own green waste and hauls it to Strathmore, where it is eventually composted—a closed-loop process where outputs from one partner become inputs for the other.
Compost used by California Growers supports healthy soil to maximize yield.

In Madera, California, the heart of the San Joaquin Valley, Jason Erickson’s family has been working the land on Erickson Farms for 150 years.

Erickson Farms began putting down roots in the 1870s, and today encompasses roughly 2,500 acres in Madera, California, where the family grows almonds, grapes, olives, pistachios and prunes.

The farm’s customers, which include familiar brands like Blue Diamond, Sunsweet and Constellation Brands, count on a reliable harvest of the agricultural products they source. This means farmers like Erickson must carefully manage soil health to maximize their yield, year after year.

An important way they do this is by applying compost, which Erickson sources from WM. Compost provides numerous benefits to agricultural soils. “It covers a wide scheme of nutrition,” said Erickson, who co-owns Erickson Farms alongside his father and brother. “It’s almost like giving a vitamin to our soil.” Soil and tissue samples taken throughout the growing season help ensure that all soil nutrients are in the proper balance.

Applying compost also helps soil retain water and deter pests, which is helpful as California’s growers confront a changing climate. “With new regulations in recent years, we’ve become much more efficient with water use, knowing that organic matter allows soil to store more water,” Erickson said. “We’ve also seen that healthy soils make our trees better able to handle stress, especially in the summers when temperatures can push 110 degrees.”

Compost is just one of several ways Erickson and his family ensure their farmlands stay productive for years to come. “My kids are growing up on the ranch just like I did. Everything we do, we do it with the next generation in mind.”
Over the years, we have observed significant changes in MSW streams. For example, between 1990 and 2018, the amount of MSW to landfills in the U.S. decreased even as the population grew. Although we are managing more waste today than we were 10 years ago, our emissions per ton have declined. In spite of this reduction, large volumes of material that could be recycled or composted are still being sent to landfills.

As North America’s leading environmental services provider, WM is committed to ensuring that all discarded material is handled in the most environmentally beneficial way, which often includes changing the behavior of industries and individuals. We are making progress by working across our supply chain to help develop new technologies and markets for post-consumer materials while educating consumers on how to dispose of all forms of waste.

Given currently available technology, many waste streams still cannot successfully or profitably be processed into new materials. To ensure that these forms of waste do not enter natural land areas or waterways, where they can cause harm as they degrade, we manage them safely and sustainably through our network of 263 active MSW landfill sites across the U.S. and Canada. Combined, these sites process over 100 million tons of waste annually.
The Making of a Modern Landfill

The scene you might picture when you hear the word “landfill” is a thing of the past. Today’s landfills are sophisticated, highly engineered structures that contribute to environmental safety and sustainability. Landfills are triple-lined, and any water that enters them is captured so that it does not enter the environment before being treated.

Beyond being safe places to store waste, landfills are often sources of renewable energy and frequently serve new purposes after closure. They are filled over many decades and are monitored for decades after closure. Therefore, WM considers a long-term view of these sites, ensuring that we mitigate potential impacts and keep communities safe and secure for generations to come.

Thousands of pumps, valves, blowers and flares are required for the safe management of modern landfills. Ongoing collection of data from these assets, often collected by checking meters positioned throughout landfill sites, is essential for landfills’ safe operation.

WM’s Connected Landfills system simplifies this work, equipping landfill gas and water management assets with internet-connected devices and sensors. Following a successful pilot at the West Edmonton Landfill in Alberta, Canada, WM expanded Connected Landfills to 12 additional sites in 2020.

The Connected Landfills system allows technicians to review data remotely via dashboards on mobile devices, allowing them to monitor changes and directly interact with equipment with the push of a button. Plus, dashboards with analysis and trending capabilities allow for better decision making. With less time spent traveling to and throughout a site, landfill employees can spend more time managing landfills’ productivity and health.

During the stay-at-home orders, employee medical leave and social distancing measures required during the pandemic, WM’s Connected Landfills provided oversight to managers, engineers and technicians, ensuring world-class operations without interruption. The technology won the 2020 Firebrand Award at the Ignition Community Conference, a conference for innovation in the industrial sphere.

Providing Long-Term Value

Sooner or later, all landfills reach capacity. But that doesn’t mean they reach the end of their useful life. After closure, monitoring continues, adhering to strict standards to ensure their long-term safety. Then, WM can convert land surrounding closed disposal sites into beneficial community assets. In addition, we currently lease land at eight closed landfills for solar energy development.

Beyond providing valuable land for renewable energy projects, closed landfills are often converted into recreational spaces such as parks, golf courses and athletic fields, as well as nature preserves and habitat for wildlife. For example, the El Sobrante Landfill in Southern California is converted to wildlife habitat as portions of the landfill close. The restored El Sobrante Landfill and wildlife preserve will eventually span over 1,300 acres of open space for the protection of 31 sensitive plant and animal species. El Sobrante is also located in an important migratory path for birds and other wildlife. Its permanent protected status means it will play a vital role in the local ecosystem well into the future. Read more about WM’s work with WHC and the social and environmental benefits of WM’s nature preserves and wildlife habitat at closed landfills.
Emergency Response Services

As an environmental services company, WM has long assisted in cleaning up debris and materials following planned construction and demolition (C&D) projects, as well as in the aftermath of natural disasters.

In recent years, as a result of climate change, emergency events have become more common and more severe. 2020 marked the most active hurricane season on record, with intense storms battering the southeastern United States. And in the West, devastating fires in multiple states made for the most destructive year for wildfires in history.

In a time of crisis or disaster, garbage, debris and recycling collection is central to a community’s cleanup and rebuilding. These crises pose challenges to our typical waste and recycling collection services—creating different types of waste that must be responsibly managed. To mitigate the impact of emergency events, and to speed up recovery, WM has established national strategies and support systems to assist local operations.

WM’s “Green Team” is a group of highly skilled drivers and technicians whose sole function is to assist areas impacted by natural disasters, weather events and other unforeseen circumstances where additional or supplemental resources are needed to maintain customer service expectations. Step-by-step guidance prepares our teams to respond safely and quickly. Each year, we review and update our disaster management plans, building on what we have learned to improve our response.

This work is both a function of our business and an obligation to the communities we serve. In addition to providing cleanup and disposal services, WM regularly provides team members and communities with the supplies and support they need to rebuild.

Hurricanes

Five major hurricanes hit the U.S. Gulf Coast within a 90-day period in 2020, the most damaging of which was Hurricane Laura, which struck southwestern Louisiana and the Texas border. After the storms made landfall, WM ensured our team members were safe and accounted for. Then, WM responders surveyed the area to ensure that buildings and other infrastructure were safe to resume operations.

We assisted local communities by restoring critical infrastructure services to the area. As one of the first responders, we delivered roll-off containers to essential businesses and utilities, local hospitals, grocery stores and shelters. We deployed a Green Team of approximately 20 team members who assisted with relief efforts, including driving vehicles, cleaning up debris...
and preparing meals. In addition, we established an Emergency Storm Debris Disposal facility to accept storm debris from FEMA responders assisting with recovery and reconstruction efforts.

Response teams came to the aid of those whose homes had been damaged or destroyed, providing tarping for roofs, hotel accommodations, supplies and meals. More than 100 affected employees received compensation through our WM Employee Cares Fund, an employee-supported fund that assists employees impacted by disasters such as these.

Beyond the internal cleanup and recovery process, WM prioritized communicating our operational status to our customers through every available medium. We also kept in contact with the employees affected by the hurricanes through the WM Now app and other communications.

Wildfires
The impacts of wildfire season in 2020 were felt throughout the western U.S. and Canada. In California, where power blackouts often disrupt our operations and our ability to communicate with drivers and customers, we require backup generators and that call centers maintain service continuity across the state during fire season.

During the 2020 wildfire season, 4.4 million acres of land burned in northern California alone. We helped prepare our team members and customers for the impact by taking inventory of personal protective equipment (PPE) such as face masks and safety glasses and reminding people of the importance of having an evacuation plan in place while also keeping a clean vegetation border around homes and other buildings. As the fires spread, our local Safety Director held daily phone calls and advised District Managers and Route Managers to ensure drivers wore the proper PPE. Technicians made sure collection trucks had working air conditioning and filters, and drivers were advised to stay in the cab as much as possible and to take breaks if they felt any effects from the smoke. In Southern California, the Bobcat Fire burned over 115,000 acres of the Angeles National Forest. We provided dumpsters and portable toilet services to a nearby equestrian facility that provided shelter for hundreds of animals and volunteers.

Oregon experienced its most destructive wildfire season on record. Fires across the state burned more than one million acres of land, killed seven people and required more than 40,000 residents to evacuate. Several WM employees had to evacuate their homes, and unhealthy smoke required WM to close two transfer stations for multiple days. During these service disruptions, WM proactively communicated service alerts to customers via a regional website, emails, phone calls and texts. WM employees also pitched in to help their neighbors, offering the use of their property for evacuees and crews fighting the fires.

Our landfills in these regions now anticipate debris from yearly fires, and we continue to build capacity to allow us to accept debris and assist in fire and hurricane cleanup.

Tornadoes
In March of 2020, Middle Tennessee was hit with a series of deadly tornadoes that caused more than $1 billion in damage across the area. WM operates the only construction and demolition (C&D) facility in the region and worked closely with the local and federal government to maintain service and facilitate debris removal from affected areas. Our team quickly ramped up operations to accommodate the approximately 78,000 tons of C&D debris, 22,000 tons of green waste and 1,475 loads of other debris that came into our Southern Services Landfill and Eco Park over the course of three months. The green waste that was diverted from our landfill operations to our Eco Park was repurposed around the facility for road bedding and other projects. With the help of Green Team members and dedicated drivers, we were able to keep the clean-up process on track.

How WM Responds to Natural Disasters
- Communicating regularly with customers and team members
- Delivering roll-off containers to assist in cleanup efforts
- Increasing landfill capacity to accommodate debris
- Providing on-the-ground support through our WM Green Team
- Supporting affected employees with the WM Employee Cares Fund
One of the many ways WM helps our customers operate more sustainably is through WM Sustainability Services (WMSS).

Through a suite of long-term advisory and implementation services, WM works closely with customers to achieve sustainability goals.

WMSS has two focus areas:

**On-site Support**
1,400 WM team members are embedded at the facilities of industrial customers, advising on and providing solutions for cost savings, sustainable materials management and regulatory compliance.

**Sustainable Sports & Entertainment**
Our professionals help advance sports teams, venues and organizations along the path to sustainability, leveraging knowledge of the complex needs and environmental impacts of stadiums and major events.

What It’s Like to Be a WMSS Expert

If Jason Hatfield’s colleagues were to describe him in one word, it would be “loyal.” It’s a quality that he’s demonstrated for the past 11 years as an Operations Support Manager with WM Sustainability Services (WMSS), supporting WMSS’s customer, Walmart.

Walmart has a goal to send zero waste to landfill in its major global markets by 2025, and WMSS is helping them get closer to that goal by recommending new ways to divert waste. Recently, our solutions have included the recycling of over 3 million Walmart associate vests into car insulation, and the sale of surplus hand sanitizer, ordered at the height of the pandemic, to an alcohol company that could reprocess ethanol into beverage alcohol.

Hatfield enjoys that every day is a new opportunity to solve problems for our customers. “Even though I’m an environmental tech guy, I’ve always been a customer-first person. I like being the guy Walmart knows they can rely on.”
An annual example of WM’s expertise in planning and executing sustainable events is the WM Phoenix Open, the largest third-party-certified zero waste event in the world. WM has sponsored the tournament since 2010, and while most fans enjoyed the tournament from home rather than on the course in 2021, we continued to engage them—as well as players and brands—in our sustainable mission.

**Fans**
WM kept the energy and excitement of the WM Phoenix Open alive through the #GreenBucketList Sweepstakes. By engaging with WM on social media, fans were entered to win access to the WM Green Suite at the 2022 WM Phoenix Open. WM also created a new virtual sustainability tour to teach fans about the tournament’s comprehensive sustainability program, and brand videos to highlight how the WM Phoenix Open implements zero waste.

**Players**
Even PGA TOUR players get to learn about the WM Phoenix Open’s zero-waste efforts. In 2021, all players received a set of glasses made by Refresh Glass, an Arizona-based glassware company that repurposes wine bottles captured from the 2020 tournament. With their circular gift, players found a quick guide to recycling and composting on course as well as sustainability metrics about the tournament’s initiatives related to water restoration, greenhouse gas emissions management and zero waste. TPC Scottsdale also worked with WM to develop new signage on waste diversion and sustainability metrics in key areas in the clubhouse.

**Brands**
All participating brands, vendors and sponsors agreed to sustainability requirements that guarantee we remain a zero waste event. Beyond ensuring that waste is not generated at the event, we prioritize brands that use post-consumer recycled content. For example, companies such as apparel manufacturer Unifi, aluminum container manufacturer Ball Corporation and paper box manufacturer Pratt all use curbside post-consumer recycled content in products that are seen or used at the tournament.

The WM Phoenix Open is just one example of the many events we manage. While the pandemic led to the cancellation of many events in 2020, the Sustainable Sports and Entertainment Team helped with a limited number of events throughout the year that:

- **Diverted** almost 1,000 tons of waste from landfills, including 226 tons of organic materials and 619 tons of recyclable material;
- **Diverted** 13 tons of food and 8 tons of other material through donations;
- **Avoided** 552 MTCO₂e through waste diversion programs; and
- **Achieved** zero waste at four events, all prior to March 2020.
WM Phoenix
Open Impact

9 years
certified zero waste

5 years
reducing our carbon footprint and
offsetting remaining emissions

325M gallons
of water restored
over six years

100%
of vendors committed to
sustainability standards

8 months
of zero waste operations each year
As we hope you’ve learned throughout this report, WM’s success is possible because of our people.

We are 48,250 drivers, technicians, route managers and corporate professionals, working behind the scenes and on the front lines of communities across North America—all doing our part for a sustainable tomorrow.

Learn more about WM:
- Sustainability Report
- ESG Resource Hub
- ESG Data Center
- WM.com
Forward-Looking Information

This report contains forward-looking statements, including but not limited to statements of opinion, view or belief about the future; goals, plans and strategies; and anticipated events, performance or results. You should view these statements with caution. They are based on the facts and circumstances known to us as of the date of this report and are subject to risks and uncertainties that could cause actual results to be materially different. Such risks include, but not limited to, failure to implement our optimization, growth, and cost savings initiatives and overall business strategy; failure to identify acquisition targets and negotiate attractive terms; failure to consummate or integrate acquisitions; failure to obtain the results anticipated from acquisitions; failure to successfully integrate the acquisition of Advanced Disposal, realize anticipated synergies or obtain the results anticipated from such acquisition; environmental and other regulations, including developments related to emerging contaminants, gas emissions and renewable fuel; significant environmental, safety or other incidents resulting in liabilities or brand damage; failure to obtain and maintain necessary permits; failure to attract, hire and retain key team members and a high quality workforce; labor disruptions and wage-related regulations; significant storms and destructive climate events; public health risk and other impacts of COVID-19 or similar pandemic conditions, including increased costs, social and commercial disruption and service reductions; increased competition; pricing actions; commodity price fluctuations; international trade restrictions; disposal alternatives and waste diversion; declining waste volumes; weakness in general economic conditions and capital markets; adoption of new tax legislation; fuel shortages; failure to develop and protect new technology; failure of technology to perform as expected, including implementation of a new enterprise resource planning system; failure to prevent, detect and address cybersecurity incidents or comply with privacy regulations; negative outcomes of litigation or governmental proceedings; and decisions or developments that result in impairment charges. Please also see the company’s filings with the SEC, including Part I, Item 1A of the company’s most recently filed Annual Report on Form 10-K, for additional information regarding these and other risks and uncertainties applicable to its business. We assume no obligation to update any forward-looking statement whether as a result of future events, circumstances or developments or otherwise.