Leading Change

2016 Sustainability Report
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A Message from our CEO

Over the past two years, we’ve focused on raising awareness of the urgent need to get serious about recycling — its economics and its well-established environmental value. This year, it’s no different.

Waste Management is North America’s largest residential recycler and, as such, we strongly believe we need to lead change to put recycling on its strongest possible foot for the future. As noted in this report and talked about broadly in the media, with our customers and numerous other stakeholders, recycling must evolve. We’ve started to see progress on this front, and steady progress is what we need — for the good times and the bad.

Change starts with first acknowledging some very real challenges facing the recycling industry, including a changing waste stream, slowing global demand, low commodity prices and rising processing costs, all of which collided to place the entire recycling industry on its heels. Let me elaborate just a bit.

A Changing Waste Environment

As a society, our waste stream is changing. We’re seeing more — and more complex — plastics and less paper. Complex sorting systems, designed for a largely paper-driven input, are not perfectly suited to process what is today a very different waste stream. Significant shifts in the global market in recycled commodities have also had to be reckoned with. As foreign economies slowed, so slowed the demand for U.S. commodities and the price of commodities plunged — dramatically and for a sustained period. The value of plastic, for example, parallels that of oil — and that value nosedived in 2015. To add to all that, we were seeing more and more non-recyclable materials coming through our recycling processing facilities, causing processing costs to rise.

In 2015, we tightened our belts on our recycling operations, increasing our efficiencies and lowering operating costs, all of which translated into corresponding benefits to our financial performance. Our teams did a magnificent job in this regard! We also collaborated with our municipal and business customers to find much-needed efficiencies in the system and we’re pleased to report that, for the most part, we have found willing partners. Collectively, we embraced the notion of “recycling right” as a critical message and took steps to ensure that message translated into meaningful action. Reducing contamination — loose plastic bags and other “tanglers” that wrap around the recycling equipment, bagged trash in the recyclables, and food and liquid waste — reduces processing costs and raises the value of the clean recyclables that can be sold. Our customers appreciate the transparency in our approach to recycling service contracts as we clarify both the costs of processing and likely returns from commodity sales. Our work with many partners on recycling education has brought contamination down significantly for many cities, including cities like Springfield, Massachusetts, Elgin, Illinois and Siler City, North Carolina, and for our material recovery facilities.
We've endeavored to lead the change to more sustainable recycling, and we are pleased to be able to say we see real progress. We're not done. We will continue to work with our customers, communities, the U.S. EPA, many states, the National Waste and Recycling Association, the Solid Waste Association of North America, Keep America Beautiful, The Recycling Partnership and many more recycling industry groups, as well as through our own campaign, Recycle Often. Recycle Right®, to get the word out on contamination. We feel confident that our efforts are reinvigorating the spirit of environmental stewardship.

**Toward “Life Cycle Thinking”**
Recycling is about the environment as well as economics. We recycle because of environmental benefits from resource conservation, reduced energy and water use, and reduction in release of greenhouse gases (GHGs). In the past decade, there’s been a great deal of focus on often costly, sometimes abstract, and frequently difficult to achieve weight-based goals. And we’ve perhaps lost sight of the concrete environmental impacts that come from recycling. The way we talk about recycling — getting to 50 and 75 percent, and even 100 percent diversion — while noble, decouples the action of recycling from the purpose of recycling.

That’s why in this report we’re focusing on the language and tangible benefits of “life cycle thinking.” When we reduce and recycle waste, we reduce the generation of GHGs and use of energy. We can track these physical benefits specifically, using well-accepted methodology developed by U.S. EPA. Throughout this report, we’re using life cycle analysis to project the benefits for our waste reduction consulting services, recycling and renewable energy production. In the section on recycling, we talk about how we used what we termed the “Spectrum” project to inform ourselves, our customers and the broader public about how recycling drives GHG reduction and energy savings. Knowing, at each stage of the management chain, the environmental benefits and the economic cost of those benefits helps our customers understand where they get the greatest “bang for the buck” in materials management.

**A Focus on GHG Reduction**
We realize we are only one link in the sustainable materials management chain. Our residential customers are another, doing their part to send the right materials to our plants. Our business customers are rethinking product and packaging design to reduce life cycle impacts. Federal and state policies and regulations that support life cycle thinking in materials management have their own important role in reducing GHGs and energy use. But we’re not waiting for a framework mandating reductions; we’re framing our sustainability goals in terms of opportunity to reduce use of carbon and to preserve natural resources.

We are thinking of our entire service portfolio in terms of the life cycle benefits we can provide. Our environmentally protective landfills secure materials that cannot be reused in another way. We are focusing on maximizing the value of those assets, for example, by providing safe and logical disposal options for our customers’ industrial wastes. We look for energy value in the landfill and continue to lead in generation of renewable energy from landfill gas. In this report, we described two new projects that convert landfill gas to carbon-free fuel.

As a company, we are a net GHG reducer — and by a lot. In 2015, our GHG-reducing services — recycling, landfill renewable natural gas projects, landfill gas-to-energy projects and carbon sequestration in landfills — saved over three times the total GHG emissions Waste Management’s operations generated all year!

We are continuing our focus on resource preservation as well. We manage 25,000 acres of land as wildlife habitats on 95 properties, and we were active in 2015 in promoting the use of industrial property to help support the health of pollinators.

We like to think of ourselves as pragmatic optimists — looking over the life cycle of materials management to reduce waste, and ready to handle our customers’ wastes safely, as the process of finding alternatives evolves over time. When we encounter roadblocks like those we’ve seen in our recycling business, we see our role as leading change to overcome them. We hope you’ll join us!

Respectfully,

**Jim Fish**
President and Chief Executive Officer
Waste Management in Summary
(As of and for the Year Ended December 31, 2015)

Waste Management, Inc. (NYSE: WM), based in Houston, Texas, is the leading provider of comprehensive waste management and environmental services in North America.

- **Giving**: $12.0M
  Total donated in charitable giving; $1.9 million in-kind services
- **Energy**: 84
  Natural gas fueling stations; 25 serve the public
- **Operations**: 5.1K
  Vehicles that run on alternative energy
- **Financials**: 136
  Landfill gas-to-energy facilities
- **Recycling**: 40.6K
  Employees
- **Conservation**: 297
  Transfer facilities
- **Landfills**: 43
  Organics processing facilities
- **2016 SUSTAINABILITY REPORT**
- **Corporate Services**: 21M+
  Customers
- **In-Kind Services**: 110
  Wildlife habitat programs
- **Wildlife Habitat Programs**: 50
  Pollinator projects

- **Capital Expenditures**: $1.2B
- **Vehicles**: $2.5B
- **Cash from Operations**: $1.3B
- **Employees**: $13B
- **Returned to Shareholders**: Total revenue
- **Employees**: 40.6K
- **Customer Base**: 21M+
For our sustainability reporting, we analyze revenues according to the disposition of the materials collected, rather than according to operating business units as described in our annual report.

Our sustainability reporting specifies each revenue stream as it would be reported according to federal and state definitions of “green” services, such as recycling and renewable energy generation. The intent is to look carefully at how we are evolving our business from a simple collection-to-landfill model to one that seeks to find value in discarded materials. In the process, we go behind the numbers in our Annual Report on Form 10-K filed with the SEC to separate collection revenues from trucks carrying waste to traditional landfills that serve to contain and monitor waste, from revenues associated with activities such as collection to recycling centers or facilities generating “green” energy.

**Methodology**

Our accounting methodology is very specific. For example, in the “recycling” category, we drill down to a material’s final destination in order to reclassify materials collected in the ordinary course of garbage collection, but separated to sell as recyclables. Reporting for our recycling facilities excludes processing residuals (i.e., contamination destined for landfill). For our innovative service lines, we include revenues associated with:

» Waste Management Sustainability Services’ integrated project management and consulting to help customers meet sustainability goals;  
» New ventures like conversion of landfill gas-to-fuel; and  
» Treatment services provided to the energy production sector.
Evolving Ratios

Our business mix ratios have changed over time in several ways. Green energy production declined in 2015 by 40 percent due to our divestiture of Wheelabrator Technologies’ waste-to-energy plants. Although we continue to support that line of service by supplying feedstock to Wheelabrator plants, we no longer retain ownership or an operating role.

This divestiture of a major green energy revenue source has had a corresponding impact on the relative distribution of our other revenues. Our landfill gas-to-energy plants remain strong, increasing from 108 plants in 2007 to 136 plants in 2015 and providing power equivalency needed to power 470,000 homes.

We do not have current plans to site new greenfield municipal solid waste landfills, and we already have installed landfill gas-to-energy plants at most landfills producing gas at levels sufficient to support this technology. As a result, we recognize that it is unlikely we will attain our 2020 goal of producing waste-based energy sufficient to power the equivalent of 1 million households. During the upcoming two-year reporting cycle, we will be evaluating a new energy goal with a specific focus on life cycle outcomes in terms of GHG reduction and substitutes for fossil fuels.

Revenues from recycling declined slightly from 17 percent in 2013 and 2014 to 16 percent in 2015. As noted in the letter from our CEO and detailed in the Waste Solutions section of this report, a long-term depression in commodity prices has challenged the profitability of our recycling line of business. We are paid by the ton for the materials we produce. When tonnage decreases due to the lightweighting of containers and other laudable waste-reduction measures, revenues from recycling will decrease, absent a rise in commodity prices.

In 2015, decreases in recycling revenues were limited, thanks to growth in our capacity to recycle coal ash, which is newly subject to U.S. EPA standards that identify coal ash treated for use in cement, wallboard and in specific agricultural applications as having a “beneficial use” for recycling. We intend to turn around this decline in total recycling revenues and discuss in this report how we are making recycling more productive and sustainable.

Our Innovative Service Line revenues were maintained at 3 percent, triple 2007 levels. These steady revenues are a testament to the value of our sustainability services consulting group, described here in this report and at www.wm.com/sustainability-services/index.jsp. We recognize that innovation takes time, and our venturing investments do not have immediate pay-off.

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1 In 2015, we refined our reporting to include the “Collection-Industrial” line of business revenue related to our oilfield treatment services (subtracting it from the “Innovative Service Lines” category.) If this revenue had been included in our “Innovative Service Lines” category, those revenues would have been increased in our 2015 report, but the relative percentage would have remained the same.
As North America’s leading provider of comprehensive waste management services, our mission is to maximize resource value while minimizing impact in order to further both economic and environmental sustainability for all of our stakeholders. Transparency is an important part of this mission. Accordingly, we are committed to consistent public disclosure and discussion of our own progress through the publication of a sustainability report every two years. In off years, we update key data and content to the most recent full year.

Our last comprehensive report was published in 2013 with available data and key discussion items updated in 2014. This report generally covers subject matter for 2015 and early 2016 for Waste Management’s wholly owned operations, all of which are located in North America. All data is for the year ended December 31, 2015, 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. This report has been prepared in accordance with Global Reporting Initiative (GRI) G4 Core guidelines.

For more about our reporting, please see Forward-Looking Information at the end of this section.

Assurance
We currently do not seek external assurance for this report. Our 2015 GHG emissions inventory has been assured by Lloyd’s Register Quality Assurance Ltd. The inventory includes direct emissions and indirect (Scope 3) GHG emissions from the following sources:

- Purchased goods and services
- Capital goods
- Fuel- and energy-related activities (not included in Scope 1 or Scope 2)
- Business travel
- Employee commuting
- Downstream leased assets

The complete assurance statement is available as part of our CDP filing https://www.cdp.net

Materiality
The content of this report has been compiled and organized based upon insights from a materiality assessment conducted by an internal team. This team is charged with ongoing stakeholder engagement, including participation in key business and multistakeholder organizations listed in the Appendix of this report, media relations, disclosure of sustainability information for sales and marketing purposes, and completion of sustainability survey requests. The materiality process involved four steps:

- Identification of potential material topics by reviewing GRI aspects, benchmarking against key corporate peers and analyzing past Waste Management reports, which themselves have been amended over time to reflect feedback from customers, community representatives, employees and non-governmental organizations (NGOs).
- Inventory of aspects and topics most important to external stakeholders, primarily NGOs and customers and their supply chain vendors, based upon requests, surveys and ongoing engagement since the last reporting period.
Survey of internal stakeholders, which included more than 40 cross-functional directors and subject matter experts, to determine which topics impact our business most. Participants were queried about topics most likely to trigger impacts over the next five years and over which Waste Management is able to exercise control.

Normalization and ranking of results from internal and external stakeholders determined by breaking scores into quintiles for scoring purposes by an independent statistician.

Forward-Looking Information
This report contains forward-looking statements, including statements concerning the company’s outlook, performance, or results in the future, as well as statements of beliefs about the future, plans and strategies or anticipated events. You should view these statements with caution. They are based on the facts and circumstances known to the company as of the date the statements are made and are subject to risks and uncertainties that could cause actual results to be materially different. Such risks include but are not limited to, increased competition; pricing actions; failure to effectively implement our business strategy; environmental and other regulations; commodity price fluctuations; disposal alternatives and waste diversion; declining waste volumes; failure to develop and protect new technology; significant environmental or other incidents resulting in liabilities and brand damage; weakness in economic conditions; failure to obtain and maintain necessary permits; labor disruptions; impairment charges; and negative outcomes of litigation or governmental proceedings. Please also see Part I, Item 1A of the company’s most recent Annual Report on Form 10-K filed with the SEC for additional information regarding these and other risks and uncertainties applicable to our business. The company assumes no obligation to update any forward-looking statement, including financial estimates and forecasts, whether as a result of future events, circumstances or developments or otherwise.

1 All references to “Waste Management,” “WM,” “the company,” “we,” “us,” and “our” are terms of convenience used to refer collectively to Waste Management, Inc. and its subsidiaries. Waste Management, Inc. is a holding company and all operations are conducted by its subsidiaries.
The matrix below summarizes the results of the assessment:

**Very Important (15-12)**
- Data Reporting and Verification (15)
- Compliance (14)
- External Recycling Rate (14)
- Local Engagement Plans & Programs (14)
- Local Environmental Impact (14)
- Public Policy Engagement (14)
- Safety Record (14)
- Anti-Corruption (13)
- Green Service Sales (13)
- Renewable Energy Generation (13)
- Innovation (12)
- Impact on Local Environment (12)
- Local Impact Assessment & Improvement (12)

**Important (11-10)**
- Business Ethics/Code (11)
- Business Mix (11)
- Energy Consumption (11)
- Labor Practices & Human Rights (11)
- Supplier Screening – Environment (11)
- Climate Change – Financial Impact (10)
- Diversity (10)
- GHG Emissions – Scope 1-3 (10)
- Risk Management (10)
- Transportation Impacts (10)

**Somewhat Important (9-8)**
- Corporate Governance (9)
- Customer Satisfaction (9)
- Customer Privacy (9)
- Economic & Local Economic Impact (9)
- Internal Recycling Rate (9)
- Lifecycle Analysis (9)
- Recycling Service Sales (9)
- Disaster Relief (8)
- Employee Demographics (8)
- Water Consumption (8)

**Less Important (7-4)**
- Alignment with International Frameworks (7)
- Contributions (7)
- Emissions of Ozone, NOx, SOx (7)
- Biodiversity Impact (6)
- Freedom of Association (6)
- Layoffs & Turnover (6)
- Social Media (6)
- Supplier Screening – Labor Practices (6)
- Supplier Screening – Social (6)
- Local Procurement (5)
- Political Contributions & Involvement (5)
- Benefits (4)
- Conflict Minerals (4)
- Executive Compensation (4)
- Government Financial Assistance (4)
2.0 Performance

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Awards & Recognition 20
As we approach 2020, the target year for the sustainability goals we set in 2007, we are beginning the process of reflecting on how far we’ve come, where our goals need to be refined and where we need to go in order to lead change in sustainable materials management. Some goals will need to be reframed based on changes in our business strategy; others must be expanded to better convey the environmental benefits our services can provide. Here are some of our initial thoughts:

Recycling

We have focused our goal and reporting on expansion of our recycling services in terms of the weight of recyclables we manage. That metric, however, is proving to be less informative than it could be. With the change in recyclable materials generated by our customers, as discussed in Waste Solutions, a disconnect has emerged between weight-based metrics and the broader purpose of recycling in terms of environmental stewardship. With this report and going forward, we’re leading change by transitioning our recycling metrics to the measurement of greenhouse gas (GHG) emissions avoided and energy savings.

This change is consistent with the premise of the U.S. EPA’s Sustainable Materials Management (SMM) program (https://www.epa.gov/smm) and as further explored by the Sustainable Materials Management Coalition of which we have been the founding partner (https://www.michaeldbaker.com/portfolio-items/guidance-on-taking-a-life-cycle-perspective-to-sustainability/). Beginning with this report and in future ones, we will calculate GHG emissions avoided as well as energy-saving reductions associated with the commodities we handle through recycling, composting and conversion into energy or products.

By evaluating recycling in the context of its impact on the environment rather than limiting it to climate change, we seek to be more transparent in communicating environmental benefits. Armed with insights on the potential for GHG reductions from specific materials management options, we have
the opportunity to evaluate business strategy, community engagement and education in terms of how the greatest environmental benefit can be obtained at the most reasonable price.

**Fleet**

Our 15 percent GHG reduction goal for our fleet has been achieved since 2011. Our reporting precision has grown over time as we joined U.S. EPA’s SmartWay Partnership, which provides a standard template to project the emissions of our waste collection fleet, including all on-road vehicles. Our on-road vehicles run on diesel, gasoline and natural gas (liquefied (LNG) and compressed (CNG)). In reporting to SmartWay in 2015, we did not separate out our renewable natural gas (RNG) generated from our landfills or purchased and used in our on-road vehicles from our reporting on use of fossil–based natural gas. This did not highlight the GHG reductions we realized by using renewable fuel. Moving forward, we will clearly identify RNG and the GHG benefits it provides. We are pleased to report that we not only have continued to exceed our 15 percent efficiency goal, but our on-road fleet vehicle efficiency jumped to 24 percent in 2015. This performance reflects the dramatic impact that our transition to natural gas vehicles, both fossil-based and renewable, is having on our collection fleet.

Historically we have not focused attention on our progress in decreasing emissions from off-road vehicles, such as yellow iron. Starting in 2016, we will provide this information in a separate section to highlight the importance of the work we are doing to “green” these vehicles.

**Renewable Energy**

With the divestiture of Wheelabrator Technologies, we divested ownership of over half of our waste-based energy portfolio. We will continue to report on the number of homes powered by our renewable energy assets, chiefly landfill gas–to–energy facilities, but will reset the level to reflect our changed role in providing waste–to–energy. We are considering an additional new renewable fuel goal. Renewable natural gas (RNG) is created from biogas from landfills and anaerobic digesters. RNG used in natural gas vehicles reduces GHG emissions by 90 percent over the use of diesel fuel. Waste Management took the lead in piloting RNG production over a decade ago and is now seeing its widespread use across the country. Read more on pages 40 and 44. In 2016, we are discussing adding a new goal for the use of renewable fuel in our natural gas fleet, relying on RNG generated at our own sites, as well as third-party, U.S. EPA-approved sites.

1 Note that we have determined that in prior years, the fleet emissions tracking inadvertently included some off–road diesel and aviation emissions as well as the on–road emissions that were intended to be the universe for this metric. In addition, the data came from fuel logs, which have been reviewed against tax credit logs to enhance accuracy. Since we are adding diversity to our fuel types, especially with the use of renewable natural gas, we are refining our reporting to distinguish among kinds of fuel. The prior years’ numbers have been reviewed for consistent reporting and are restated here. The restatement uses U.S. EPA SmartWay methodology for its calculations.

2 Total includes landfill gas–to–energy, waste–to–energy, solar, waste–based fuel and steam.

3 Reflects the impact of the divestiture of Wheelabrator.
Empowering Customer GHG Reductions
The ENSPIRE™ platform created by Waste Management Sustainability Services allows customers to calculate and set goals for GHG reductions from waste reduction, reuse and recycling. We are evaluating how we can measure and demonstrate the productivity of this part of our business. This new goal is consistent with our overall approach of serving customers by reducing their carbon footprint — and doing so with clear tracking and ambitious metrics.

Wildlife Habitat Sites and Programs
Waste Management attained its 2020 goals for Wildlife Habitat Council (WHC) programs and protected acreage in 2010 and maintained it through 2015. Since 2015, we and our WHC partner have begun to refresh our thinking on habitat projects and their fundamental purpose: to conserve habitat, enrich individual communities and advance environmental stewardship. This mindset is consistent with our business goal of being a trusted community partner. As time goes by and our portfolio of large land-based facilities, such as landfills, does not expand to the extent it has in years past, while our development of alternatives to land-based waste management increases, we need to think more broadly about stewardship. Our materiality review in 2016 identified impact on local environment and local engagement as among the most important issues for us. In 2017, we will be discussing new metrics to capture how we are engaging with local communities in the service of environmental stewardship and education, as well as how our programs at our facilities can help address the crisis of pollinator depletion.

Number of Acres Protected

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Goal</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>17,000</td>
<td>28,000</td>
<td>27,000</td>
<td>26,000</td>
<td>25,000</td>
</tr>
</tbody>
</table>

Number of Wildlife Habitat Programs

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24</td>
<td>134</td>
<td>132</td>
<td>119</td>
<td>110</td>
<td>100</td>
</tr>
</tbody>
</table>

1 Numbers reflect both “Lands for Learning” projects and specific habitat sites.
## Sustainability Key Performance Indicators

### GHG Footprint

<table>
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<tr>
<td></td>
<td>13.01</td>
<td>14.01</td>
<td>14.08</td>
<td>14.33</td>
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### Potential Avoided GHG Emissions

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<tr>
<td></td>
<td>4.700</td>
<td>4.740</td>
<td>5.636</td>
<td>4.588</td>
<td>1.040</td>
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</tbody>
</table>

### Waste-Based Energy Benefits

<table>
<thead>
<tr>
<th>Tons of Coal Equivalent</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.089</td>
<td>6.220</td>
<td>6.145</td>
<td>5.973</td>
<td>2.513</td>
</tr>
</tbody>
</table>

For footnotes, see page 17.
Sustainability Key Performance Indicators, cont.

Resource Savings Achieved Through Recycling

Household Equivalent (in millions)

Cars Off Road (in millions)

Percent of Waste Management Modern Landfill Liners Failing to Prevent Off-Site Contaminated Groundwater

Safety Performance

Total Recordable Injury Rate (incidents per 100 employees)

Vehicle Accident Recordable Rate (driver hours without a vehicle accident, in thousands)

Philanthropy

Charitable Giving (in millions)

For footnotes, see page 17.
Key Performance Indicator Footnotes

1 Since 2013, we have used the modified 100-year global warming potentials (GWPs) promulgated by the U.S. EPA. Pertinent to our carbon footprint, U.S. EPA revised the GWP for methane from 21 to 25 and the GWP for nitrous oxide from 310 to 298.

2 We have corrected our 2012 process number to include power generation and refrigerants used at sites included in previous years’ calculations but exempted by the EPA’s GHG reporting rule. We are including these units for consistency over time, amending last year’s reporting number.

3 We have changed our methodology for calculating fleet efficiency to conform to U.S. EPA’s most recent (2013) SmartWay Truck Tool. In order to evaluate relative emissions and progress toward our 2020 transport emissions reduction goal, we have recalculated our 2007 baseline for collection vehicles and our 2011–2013 emissions using the 2013 tool. In addition, we have changed our database for making these SmartWay calculations from our prior reliance on fuel logs to the use of records compiled for tax credit and fee purposes. The tax documentation reflects fuel purchased in a year, including some insignificant amounts of fuel stored rather than used in a given year. We believe the corporate tax records are more complete than the facility-specific fuel logs. The transition to these records accounts for part of the increase in emissions from 2012 to 2013. Note that our transportation emissions reported here include those from both our collection fleet and our non-collection “yellow iron” (i.e., off-road equipment such as forklifts and excavators) used on site. A small amount of fuel in this category is used for nontransportation purposes (e.g., running emergency generators or barbeque grills on site), but we do not subtract these from our transportation totals.

4 We are in transition in the way we track electricity data. In 2013, we hired a third party to assist in developing and reporting electricity data, making use of the enterprise accounting system’s coding of accounts paid. We believe that this accounting system is more accurate than our previous estimation, which used a representative sample of Waste Management operations to project entity-wide emissions. We believe our previous estimations, in fact, erred on the high side. The dramatic reduction in energy use in 2013 is thus likely due in large part to overestimation in prior years rather than a true reduction from previous emissions. In 2014, we will continue to refine our procedures for calculating energy use, with a goal of developing a more comprehensive energy conservation program.

5 We are reporting these data to inform our customers and the public about the potential GHG reduction benefits associated with carbon storage in landfills, our renewable energy production and the value of the recyclable materials we collect and process. We are not presuming to characterize how emerging regulatory programs will allocate credit for these avoided emissions, so we do not claim these GHG reduction benefits as our own nor attempt to deduct these reductions from our carbon footprint.

6 Increases in productivity in 2013 were primarily the result of running our waste-to-energy plants at higher capacity and including energy generated from wind projects in our calculations.

7 The GHG savings figures for 2011 and 2012 were based upon estimates made using the National Recycling Coalition (NRC) Environmental Benefits Calculator. Consistent with our efforts to align our reporting more closely with current U.S. EPA methods where possible, we have converted our estimates of the benefits of recycling to those developed using U.S. EPA’s Waste Reduction Model (WARM), which reports benefits in MTCO2e (the measure consistent with the other units reported in this chart). Our 2011 and 2012 emissions remain those calculated using the NRC model, but they have been converted to MTCO2e for purposes of comparison. (Note that our 2012 report erroneously stated the recycling savings were already expressed as MTCO2e.) Also note that U.S. EPA has yet to include updated GWP numbers in its WARM software. In our calculations, we assume that, by recycling, we divert materials from the average landfill nationally, not solely from our modern landfills with landfill gas-to-energy capacity. If instead our recycling were to divert materials only from our own modern landfills, the emissions reductions achieved by recycling would only be 31,613,385 in 2013. Note also that the increase in emissions reductions realized by recycling does not correspond arithmetically to the increase in total tons recycled. That is because paper recycling achieves very high emissions reductions, and the relative proportion of paper in the recycling stream is declining as consumers shift from paper-based information to electronics (e.g., from newspapers to e-readers).

8 For a discussion of the protocols that govern this calculation of carbon storage or sequestration, see pg 109 of the Appendix.

9 Tons of coal equivalent is calculated based on the equivalent number of households that could be powered by Waste Management energy production. Note that standard industry assumptions about household energy use differ for the waste-to-energy and landfill gas-to-energy sectors: Standard waste-to-energy reporting is 1,000 households per installed megawatt, while the household conversion for landfill gas-to-energy is based upon U.S. Energy Information Administration data that is updated yearly. We have not included the energy value of our wind projects in this entry because there is no sector conversion template comparable to that for waste to energy and landfill gas-to-energy.

10 Modern landfills are post-1993 and are permitted under 40 CFR Part 258 Subtitle D. Off-site contamination is regulatory corrective action required to address off-site impacts to groundwater.

11 WM modern landfill liners continue to perform as designed, not allowing leakage through the liner that required corrective action to clean up groundwater under neighboring priorities. We have also received questions asking whether the metric refers to potential landfill leaking or a more general facility reference, and have clarified.

12 The Vehicle Accident Recordable Rate for 2011 was restated to account for resolutions of vehicle accident investigations that were made following the publication of our 2012 report.
2015 was a very successful year for Waste Management that saw us continue our focus on core pricing, disciplined growth and controlling costs. That same focus has continued through 2016, as has our commitment to sustainable business practices balancing economic, social and environmental priorities.

Jim Fish, President and CEO

### Revenue

**(in millions)**

Revenues decreased in 2015 primarily from the sale of Wheelabrator Technologies.

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$13,262</td>
</tr>
<tr>
<td>2015</td>
<td>$12,961</td>
</tr>
</tbody>
</table>

### Adjusted Income From Operations

**1**

(in millions)

Income from operations grew nearly $100 million in 2015.

<table>
<thead>
<tr>
<th>Year</th>
<th>Adjusted Income From Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$2,088</td>
</tr>
<tr>
<td>2015</td>
<td>$2,185</td>
</tr>
</tbody>
</table>

### Adjusted Operating Margin

**1**

Adjusted operating margin increased 120 basis points from 2014 to 2015.

<table>
<thead>
<tr>
<th>Year</th>
<th>Adjusted Operating Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>15.7%</td>
</tr>
<tr>
<td>2015</td>
<td>16.9%</td>
</tr>
<tr>
<td>----------------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Operating Income</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Adjusted Operating EBITDA</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Revenue Adjusted EBITDA</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Adjusted Operating EBITDA Margin</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Free Cash Flow</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Adjusted EPS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Share Repurchases</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dividends</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Debt</strong></td>
<td></td>
</tr>
</tbody>
</table>

1 Adjusted Income from Operations, Adjusted Operating EBITDA, Adjusted Margins, Adjusted EPS and Free Cash Flow are non-GAAP measures. Please also note that 2014 Revenue, Adjusted Income from Operations, Adjusted Operating EBITDA, Adjusted Margins and Adjusted EPS exclude amounts attributed to business and assets divested in 2014, primarily Wheelabrator Technologies, in order to provide a more meaningful comparison to 2015 results. Please see pg 94 in the Appendix to this report for additional information and a link to reconciliations of these measures.
Corporate Awards

The following are representative of the many awards Waste Management has received in the past two years:

**Corporate Sustainability**
- Change the World, Fortune Magazine 2015
- FTSE4Good Index Series 2011-2016
- Euronext Vigeo World 120 Index 2012-2015
- 100 Best Corporate Citizens, Corporate Social Responsibility Magazine 2015

**Environmental**
- 50 Hottest Companies in Bioenergy, Biofuels Digest 2014-2015
- Champions of the Environment Award, New York City College of Technology 2015
- Sport for the Environment Winner, Beyond Sport 2014

**Workplace Recognition**
- “Best for Vets” Employer, Military Times 2010-2016
- Corporate Equality Index Score 90+, Human Rights Campaign 2011-2016
- Top Military Friendly® Employer, G.I. Jobs 2010-2015
- 50 Best Companies to Sell For, Selling Power Magazine 2015-2016
- Employer of Excellence Award, Texas Workforce Commission 2015
- Top 50 Employers, Equal Opportunity Publications 2015

**Community**
- Community Partner of the Year, Wildlife Habitat Council 2015
- Corporate Lands for Learning of the Year, Wildlife Habitat Council 2015
- Best Community Partner, Neighborhood Alliance of Central Oklahoma 2015
- Gold Award for Educational Program Excellence, SWANA 2015

**Business Recognition**
- Supplier of the Year Services Award, BASF 2015
- Recycler of the Year Business Category, MassRecycle 2015
- Supplier Leadership Award, Sustainable Purchasing Leadership Council 2016
3.0 Waste Solutions

- Waste Reduction 22
- Recycling 29
- Waste-Based Energy 44
- Organics 40
- Innovation 47
- Waste Management Phoenix Open Feature 49
Waste Management Sustainability Services (WMSS) is an ISO 14001/ISO 9001 certified team of experts — executives, scientists, architects and innovators — committed to helping customers innovate and optimize to create sustainable businesses. This team leads customers to develop and implement a range of complex and ever-adapting programs to meet sustainability, regulatory and cost-saving initiatives. In the process, customers have full access to Waste Management’s resources, technologies and innovations, which comprise the leading portfolio of environmental solutions in North America.

WMSS’s operations and integrated consulting capabilities include materials planning, recycling, waste disposal and compliance, all while driving cost savings by implementing continuous improvement, investing in emerging technologies and leveraging economies of scale. We combined our understanding of customers’ sustainability challenges with our experience with the logistics of environmental services of all kinds to create ENSPIRE, an interactive analytic interface for accessing and evaluating data. Key measures of continuous improvement for our customers are tracked in three areas: Customer Satisfaction, Safety and Cost Savings.

Safety is the primary metric used to measure continuous improvement. We have an experienced team of safety professionals to assist field personnel with developing site-specific health and safety plans. In 2015, our business units working at customer locations worked 2.5 million hours per year with a total recordable injury rate of 0.72.

In 2015, we delivered savings in excess of 10 percent of revenues in nearly a third of customer plants where we have service engagements. For six of our industrial customers, four of which are original equipment manufacturers, cost savings exceeded $1 million each. WMSS’s experienced consultants are an important compliment to Waste Management’s service solutions for customers with sustainability goals, whether on-site or off-site, and whether national in scope or in a particular service area.
Waste Management’s Sustainable Services At-A-Glance

Our team helps customers innovate and optimize to create more sustainable businesses

Founded in 1997

>400 Professionals

$165M+ Customer Cost Savings Since 2003

$12.4M saved in 2015

141 Programs, including

- 7 Metals/Pulp & Paper
- 34 Auto Manufacturing
- 25 Refining/Energy
- 16 Chemical/Pharmaceutical
- 5 Pipelines
- 54 Manufacturing

99% of Customers Completely Agree/Agree WMSS Meets, Needs & Provides Valuable Service

Customer Cost Savings by Solution Type

- Process Improvement: 29%
- Strategic Sourcing: 19%
- Optimized Logistics: 18%
- Recycle/Reuse: 34%

1 2015 survey of 180 customers
Product and Material Solutions
We partner with customers to help them Design with Intent so they can make products more sustainable and recyclable from the outset. This process takes a systems approach to product design that considers three factors: material selection, ease of disassembly and recycling infrastructure capabilities. The ultimate goal is to return resources to the value chain after a product’s use rather than send valuable materials to landfill. Similarly, we can help customers Design for Recyclability by thinking through where a product goes when discarded in order to understand how the material can be recycled or if the waste can be eliminated altogether. A pioneering food and beverage manufacturer, for example, wanted to develop an innovative and efficient product delivery system, with a goal of achieving widespread recycling of their product at typical material recovery facilities. We combined industry research with physical testing at our sorting facilities to provide guidance on the recoverability and recyclability of the product prototype.

For products and packaging already in the marketplace today, WMSS takes a product through a typical recycling process to see which components can or cannot be recycled and to determine if there is a viable commodities market for post-consumer materials. When a consumer packaged goods company started a marketing campaign that touted keeping its products out of landfills and returning packaging materials to the value chain, we evaluated 19 of its personal care products for suitability of curbside recycling. Our evaluation combined our own recycling professionals with third-party processors to provide recommendations for material management strategies, recycling technologies and product design attributes. The results of our study helped the customer avoid false claims, increase public transparency and advance its R&D process for future products and packaging.

Big League Success: Boston’s Fenway Park
In 2015, our Total Recycling Programs at Boston’s Fenway Park have resulted in some big numbers that made a big difference and earned the Boston Red Sox the MassRecycle’s 2015 Recycler of the Year Award in the business category.

914 Tons  
Waste converted to energy

2,091 Trees  
Conserved, enough to produce 25.8 million sheets of newspaper

398 Tons  
Material diverted from landfill

1,516,560 kW  
Hours of electricity saved, enough to power 145 homes for a year

1,219,540 Gallons  
Water conserved, enough to meet the daily fresh water needs of 16,260 people

1,599 Cubic Yards  
Landfill airspace saved, enough to meet the annual municipal waste disposal needs of a 2,053-person community
Process Solutions
We help companies and organizations who have set ambitious zero waste-to-landfill goals achieve those goals through our consulting and advisory services group and the largest dedicated on-site team in North America.

The consulting team conducts comprehensive audits of the social, environmental and economic impact of our customers’ businesses. What separates WMSS consultants from other consulting groups is the project doesn’t end with the audit. We make recommendations for cost-effective ways to improve energy efficiency, resource management, waste diversion and alternate disposal opportunities. Then we develop detailed roadmaps for eliminating waste and executing this strategy on site, often through reduced demand for source material and increased recycling.

Our on-site team is embedded with customers seeking sole-source suppliers with the infrastructure and expertise to execute national waste reduction programs. With their understanding of each customer’s operations and unique challenges, our on-site employee can deliver low-risk, high-value solutions to complex environmental, business, safety and regulatory needs.

Through WMSS, our on-site team and local area projects providing sustainability solutions, WM provides a broad array of services to its customers. For example, we have developed large-scale recycling initiatives for retail stores, college campuses and public venues. Successful waste reduction for any venue with thousands of square feet and thousands of visitors requires strategic planning to determine what can be recycled and how to maximize results. Such is the case at Patriot Place, a 1.3 million square-foot shopping, dining and entertainment destination adjacent to Gillette Stadium, home of the NFL New England Patriots and the MLS New England Revolution. Our Total Recycling Program team collaborated with Patriot Place management for 12 months in advance of launching the Waste, Recycling & Organics program. Tenant meetings, janitorial training, container monitoring, equipment tutorials and continuous communications were among the steps taken to decrease waste by 32 tons, increase landfill waste diversion from 26 to 44 percent and divert 90 tons of organics from landfill. The latter reduced CO2 emissions by 82 metric tons, as calculated using our ENSPIRE® platform. This successful collaboration led to Patriot Place being one of the first shopping centers in Massachusetts to divert organics from the landfill, and the WRO program becoming a role model for other shopping centers.

We also often partner with sports events or business conferences to create sustainable events with a zero waste challenge, similar to our own Waste Management Phoenix Open golf tournament. Through recycling, composting, waste-to-energy initiatives and donations, these events cumulatively have diverted 99.56 percent of waste, or 449 tons, from landfills.

Analysis & Intelligence
WMSS offers customers a portfolio of tools to measure, manage and communicate their sustainability progress and goals. ENSPIRE is our online business intelligence platform that aggregates and repackages raw sustainability data into one interactive dashboard, helping to accurately track financial, environmental and social performance; facilitate streamlined decision-making and simplify reporting. Upon collection of data for reporting purposes, WMSS provides analysis to inform strategic planning, best practices and efficiency opportunities. In 2015, ENSPIRE managed more than 10 million tons of materials for customers at more than 39,000 locations. In 2015, we managed 15 million tons at nearly 60,000 locations.

Meeting the need for an increased focus on corporate transparency, ENSPIRE is highly customizable to “speak” our customers’ language and enable them to see the data most relevant to their operations. For example, an international cruise line uses the
platform to provide data for corporate sustainability reporting according to Global Reporting Initiative standards. With a single click, the cruise line can run side-by-side comparisons of any ship in any port, as well as generate customized metrics such as pounds of waste produced per passenger per night at sea. The ENSPIRE platform not only measures efficiency, but creates it as well. A food manufacturer has reduced time spent on monthly sustainably reporting from 40 hours to three hours, gaining nearly a week of time each month to focus on strategic sustainability efforts. This customer uses ENSPIRE as its sustainability dashboard to measure progress toward a goal of recycling 90 percent of waste generated, as well as tracking energy and water usage.

Our Construction group’s Diversion and Recycling Tracking Tool (DART®) helps project planners, contractors, architects and building owners set “green” performance targets and measure their progress during construction, renovation and demolition projects. DART is used across the United States and Canada to track both materials reused on construction sites and those processed for recycling off site. The diversion rates captured through DART support LEED certification and corporate sustainability reporting. In 2015, more than 416,627 tons of material was diverted through reuse or recycling. Our top 10 construction customers alone put more than 142,692 tons of materials to reuse. These customers use DART to create diversion plans, monitor their progress and report their final performance on a project-by-project basis.

For customers who want a “big picture” view of their product’s environmental impacts, we offer Lifecycle Assessments that evaluate all stages of a product’s life — raw material extraction, manufacture, distribution, use, repair and maintenance, and end-of-life disposal or recycling. The analysis provides insights into which stages have the greatest potential to avoid GHG emissions or to conserve natural resources.

Our Vendor Scorecards are a supply chain management tool that helps customers assess whether their vendors meet sustainability goals, including compliance with sustainable purchasing policies and packaging requirements. The scorecards can then be used to create more sustainable purchase programs, improve the design of products and packaging and eliminate waste.

**Third-Party Verification**

In a consumer landscape awash in green claims, many of our customers seek external verification of their efforts to reduce waste, save energy and achieve other sustainability goals. WMSS serves as a guide through this process, including advising on these third-party rating and certification systems.

- **BOMA 360**, from the Building Owners and Managers Association International, validates best-in-class management practices in building operations and maintenance; safety, security and risk management; training and education; energy, environmental and sustainability efforts; and tenant relations and community involvement.
- Council for Responsible Sport certifications maximize opportunities at sporting venues around the world to divert waste to recycling and compost, switch to 100 percent renewable power, use as many regional resources as possible, offer free access to thousands of youth and other targeted audiences, all while providing tens of millions of dollars in economic impact to host cities and regions. In 2016, we will become the primary on-the-ground evaluators for events applying for certification.
- **ENERGY STAR** certification includes benchmarking with the ENERGY STAR Portfolio Manager® and validating applications.
- Leadership in Energy and Environmental Design (LEED) uses our accredited consultants to certify entire green building projects or obtain individual credits and helps customers quantify materials in the waste stream via LEED MR6 waste audits, of which we conduct approximately 40 per year.
- Green Globes Certifications are a web-based program from the Green Building Initiative for green building guidance and certifications that includes an on-site assessment by a third party for new buildings, renovations, building management and more.
- **U.S. Zero Waste Business Council (USZWBC)** facility certification program goes beyond waste diversion numbers to focus on the upstream policies and practices that make zero-waste programs successful. USZWBC has crafted the third-party verified facility certification to meet the requests of businesses for a valid, comprehensive verification of zero-waste achievements.
Helping Our Customers Reach Their Sustainability Goals

Our resources, technologies and innovations offer a broad portfolio of environmental solutions in North America. Here’s how these solutions are benefitting our customers.

**Heavy Equipment Manufacturers**
Achieved $2 million+ in 2015 cost savings.

**Regional Hospital**
Diverted 4,280 pounds of hazardous pharmaceutical waste from entering the water supply in one year.

**Global Retailer**
Contained costs and supported compliance by managing waste streams — such as regulated materials, universal waste, solid waste and recycled materials — at return centers.

**Automotive Manufacturer**
Achieved a 70 percent reduction in waste generation on a pounds-per-vehicle basis.

**Chemical Manufacturer**
Saved $14 million over the past 7 years, in part by diverting 100,000 gallons per week of bulk organic waste to alternative fuel production.

**Oil Company**
Achieved a 20 percent recycling rate and realized $4.3 million in costs savings over 4 years.

**Sporting Venue**
Increased diversion from 26 to 44 percent and reduced CO2 by 82 metric tons.

$2 million+ 4,280 pounds diverted

$14 million $4.3 million

70% reduction

82 metric ton reduction
Public/Private Partnerships for Disaster Relief
Government entities, nonprofits and businesses have partnered to respond to over 800,000 pounds of debris migrating from the coast of Japan to the Alaskan and Canadian shoreline over the past five years. WMSS has been handling the logistics of removing and recycling where possible more than 3,400 bags of debris – enough to fill 36 rail cars. The logistics of the cleanup are daunting. “Super sacks” of debris are helicoptered from remote areas to central locations where the bags can be barged to a sorting area. The volume of material exceeded the capacity of Alaskan landfills, and alternative disposal capacity needed to be found to secure the sensitive environment. Plastic debris, in particular, poses a threat to marine mammals and birds. We also worked with our partners to educate communities along the Alaskan coastline on how they could do their part by reducing use of disposable packaging, reusing plastic containers and recycling in the home.

Meeting the Needs of the Healthcare Industry
Two divisions of WM work with the healthcare industry to reduce infectious medical waste and to provide advice facility-wide on means to reduce waste, recycle and assure protective disposal of the diverse streams of waste coming from hospitals and other healthcare providers. WM Healthcare Solutions (WMHS) focuses on protecting the environment from potential impacts from infectious medical waste. In 2015, WMHS treated over 15 million pounds of infectious medical waste, then sent the non-infectious residue for secure disposal at secure landfill facilities. Its highest-volume treatment facility, in Vernon, California, is Silver LEED-certified and the recipient of the 2012 County of Los Angeles Green Leadership award.

WMSS – ICS (Healthcare Integrated Customer Solutions) works with healthcare customers (96 hospitals and well over 1,000 smaller locations) to manage their entire waste generation in a sustainable way. In 2015, WMSS – ICS hospitals collectively achieved a solid waste-to-recycling diversion rate of 33 percent, placing them 10 percent above the median recycling rate of sustainable hospitals as reported by Practice Green Health. In 2015, we worked with 100 hospitals on plans to optimize waste efficiencies, for example, reducing spending on solid waste by 40 percent for the year at a major healthcare campus. By introducing source separation of waste at another hospital system, we reduced waste to landfill by 33 percent.

WMSS’s Remote Services Team
For some customers, the best options for sustainable materials management involve leveraging both Waste Management’s local assets and a broader network of third-party providers to create client solutions that span in-plant, local service and more remote specialized service providers. WMSS Remote Services serves as both broker and asset provider to maximize efficiencies and meet customer goals for maximal reuse and recycling.

Remote Services offers the customers nearly unlimited accessibility to their project managers, who work remotely and are not required to travel and work from offices. Remote Services offers customized and consolidated billing, regulatory compliance support assistance, access to the WMSS network of third-party providers (already vetted and contracted), structured cost saving programs and a formal Best Practices program. The results are reflected in responses to the question, “How likely are you to recommend the services of WMSS to a friend, relative or colleague?” — 4.65 out of 5.00.
Recycling has been a growing and dynamic movement in North America, for more than three decades. In our early curbside recycling programs, we required customers to sort their recyclables into separate bins. For example, many communities provided three bins: one for newspaper, a second for mixed paper, and a third for glass and metal containers. Since then we’ve been leaders in helping the recycling industry evolve into a more efficient and productive system.

For example, we learned quickly that more people recycle when it’s more convenient, so we replaced hand-carried bins with wheeled carts. As the recycling mindset grew more mainstream, we grew our vision to recycle more by transitioning to single stream recycling. And, we backed that vision with a $1 billion-plus investment in collection and processing infrastructure to support expected growth.

It worked. Today, our recycling tons have increased 88 percent since 2007. This growth, however, has created a more complex industry that brings new challenges and opportunities. To manage and seize both, Waste Management once again is looking forward and leading where change is needed.

A Global Marketplace

The explosive growth in recycling tons soon increased their trading in global commodity markets. Today, Waste Management exports a third of the paper we collect to four continents. While this global market has supported recycling growth, it also means that market conditions — both positive and negative — are a business reality that we must constantly manage. For the fourth consecutive year, commodity prices declined in 2015 driven by global market conditions that included:

» The Chinese economy — which purchases 29 percent of the traditional material recovery facility (MRF) and paper we manage — from its GDP growth of 12 to 14 percent to 6 to 7 percent.
» A strong U.S. dollar that has resulted in a depressed price for our commodities because feedstock can be bought from other countries for less.
» A weak market for plastic, which is essentially a petroleum product, with pricing that has fallen with declining oil prices; as a result, plastics manufacturers can purchase virgin resin at bargain prices.

Learn About Single Stream Recycling
https://www.youtube.com/watch?v=hdGjiKJsgRk&index=5&list=PLMxa3lalUWUsva3sZasOZyMqeL-HW5gnl
2015 Recycling Performance

What We Recycled

Waste Management Recycling Mix 2015
Material: Tons

- Paper 7,791,905
- Mixed Organics 2,468,740
- Glass 703,495
- C&D/Wood 397,799
- Metals 428,576
- Plastics 408,489
- Mixed Recyclables 774,390
- E-Waste/Lamps 16,118
- Fly Ash 1,062,203
- Other 72,958

Total Tons Recycled 14,124,673

Why We Recycled

To Save 110.6 Million Mature Trees

To Meet the Annual Municipal Waste Disposal Needs of 46.4 Million People

To Fulfill the Annual Power Needs of 1.79 Million Homes

To Supply Enough Fresh Water for 26.2 Million People for a Month

To Avoid 32.5 Million Metric Tons of GHG Emissions

To Save 36.1 Million Cubic Yards of Landfill Space

To Save Through Recycling the Virgin Materials Needed to Replace 10.2 Million Tons of Paper, Metal, Plastic and Glass

By Conserving 18.7 Billion kWh of Electricity

Where We Recycled

Material Recovery Facilities (MRFs)
- 43 Single Stream
- 4 Dual Stream
- 37 Paper Only or Other Commercial Materials
- 8 Construction and Demolition Debris
- 6 High Grade
- 6 Other
The persistent decline in commodity markets has resulted in the need to manage our business as efficiently as possible, largely by closing or selling 30 underperforming facilities. During 2015, we also continued to work closely with our customers and other partner organizations to improve the quality of recyclables collected at the curb to avoid costly interruptions to our system from unsuitable materials. Read more about those efforts on page 34.

A Changing Waste Stream

To understand how our business has changed over the past three decades, consider your own daily life: There’s a good chance that you read a physical newspaper less frequently, drink more water out of plastic bottles and receive more cardboard boxes from online purchases. Changes in what we buy and how we live impact what ends up in our recycling carts.

Newspapers were the foundation of recycling programs for many years, and our materials recovery facilities were built to process 80 percent paper and 20 percent containers. With a 50 percent reduction in newspaper readership over the past decade, our paper-to-container processing ratio has is now 60 and 40 percent, respectively, and is inconsistent with the design of our facilities. The lightweighting of containers also been a major change in waste streams, with today’s plastic bottles weighing 37 percent less than they did 15 years ago. This has a significant impact on our plastic processing volume, creating another business challenge.

Evolving Toward New Measures of Success

While global commodities markets may shift in our favor over time, it’s a safe bet that newspaper and lightweighting trends will not reverse. This is our new normal, and we’re intent upon finding ways to make it work for our business and our planet. One way is to work more closely with the companies that make the products and packaging that we recycle in order to learn more about consumer purchasing trends and how they affect our operations.

We’ve long known it’s better to prevent waste than to recycle it — a fact underscored by new data. Studies show that some types of new plastic packaging technology — even when not recyclable — use fewer natural resources and cause fewer life cycle GHG emissions than previous generations of packaging. This point was demonstrated by the U.S. EPA and the State of Oregon when they analyzed the GHG emissions associated with recyclable metal, rigid plastic and cardboard packaging with nonrecyclable, multilayered plastic pounds — those used for express mail, juice and even soup.
Fresh insights gained from these types of studies combined with the business challenges created by commodity markets and changing waste streams have prompted us to pause and reconsider what is the best measure of success in our business today. For years, metrics such as weight and volume have been common measures of success for our industry, while terms such as “zero waste” have often become aspirational goals for customers. How do changing economics affect traditional metrics? Do new packaging technologies skew weight and volume results? And, what is the ultimate environmental benefit of recycling? In answering these questions, our focus is evolving toward a new key metric for success — reduction of GHG emissions.

Analyzing Environmental Benefits Across the Service Spectrum

In the past year, we’ve embarked upon a project to better understand the relationship between GHG emissions and economics across the spectrum of services in our industry — a relationship that our customers especially want to understand as they seek to maximize the environmental benefit of their investment in waste services. Our analysis began by creating a series of disposal scenarios, starting with sending all waste to landfill and then adding incremental diversion options all the way through gasification. Using U.S. EPA 2013 Facts and Figures, we pulled out tons available for diversion for each scenario and then applied U.S. EPA’s WARM tool (https://www.epa.gov/warm) to create an estimate of the associated GHG emissions reduction. Then, we examined the cost associated with each scenario, based on our national cost averages for that scenario. The overlay of the two analyses reveals the relative cost of achieving the GHG emissions reductions associated with each scenario.

The key takeaway: 84 percent of GHG emissions reduction can be achieved with Best Practices landfill gas capture systems combined with diversion of just 32 percent of the total waste stream, or 85 percent of the traditional recyclables that communities generate, such as bottles, cans and paper. Additional reductions can be achieved in smaller increments, but at a much higher cost per unit of carbon reduced. The analysis also shows that the emissions from our collection trucks have a small negative impact as compared with the emissions reduction of recycling and methane capture activities.

### Coffee Packaging Energy Consumption (MJ/11.5 oz.) CO2 Equivalent Emissions (lbs./11.5 oz.) MSW Waste Generated (lbs./100,000 oz. of product)

<table>
<thead>
<tr>
<th>Packaging Type</th>
<th>Energy Consumption</th>
<th>CO2 Emissions</th>
<th>MSW Waste Generated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recyclable Steel Can</td>
<td>4.21</td>
<td>0.33</td>
<td>1,305</td>
</tr>
<tr>
<td>Recyclable Plastic Container</td>
<td>5.18</td>
<td>0.17</td>
<td>847</td>
</tr>
<tr>
<td>Nonrecyclable Flexible Pouch</td>
<td>1.14</td>
<td>0.04</td>
<td>176</td>
</tr>
</tbody>
</table>
Another step in our analysis examined the associated life cycle GHG emissions of various materials within the recycling stream. Assuming an 85 percent recycling rate, the greatest emissions reduction potential in order of recycling impact is as follows:

» Paper, based on both the quantity of paper in the waste stream and the carbon emissions-reduction potential associated with harvesting fewer trees;

» Metal, because recycling results in reduced energy consumptions during remanufacturing and reduced mining of the virgin materials required to produce them, even though metals are a small portion of the waste stream;

» Plastic bottles offer a relatively small amount of emissions-reduction potential given the small weight of plastics in the waste stream, though recycling does avoid using raw materials and saves energy; and

» Glass makes up more of the waste stream by weight, but there is a relatively small GHG emissions benefit associated with recycling versus using virgin raw materials — primarily sand.

We concluded our analysis by evaluating the cost to reduce a ton of GHG emissions. The following diagram demonstrates the relative environmental and economic benefits of recycling various materials, with paper, metal and plastics the most compelling for both. While the GHG reduction potential of food waste is meaningful, the economic case is harder to make.

Based on the information from this analysis and through the application of lifecycle thinking concepts, we are better positioned to help customers develop waste programs and solutions that focus on their ultimate goal of achieving maximum reductions in GHG emissions in the most cost-effective manner possible.
As recycling programs have grown and flourished, we have seen the convenience of single stream recycling programs effectively drive increased participation, volume and landfill diversion rates.

The challenge this convenience brings, however, is increased contamination in the recycled waste stream. As packaging alternatives to tin, aluminum and glass have become more prevalent, consumers are often confused about the recycling acceptability of packaging, such as pouches and many plastic materials. When in doubt, about a quarter of consumers put the material in the recycling bin anyway. As a result, we must sort through a hodgepodge of items — plastic bags, garden hoses and propane tanks to name a few — at our recycling facilities. This is causing the industry to experience all-time-high contamination rates, which average 16 percent nationally at our single stream materials recovery facilities (MRFs).

To keep recycling viable, we are addressing contamination on both the national and local scale. Our strategy was developed by looking at every phase of our recycling business from operations and processing to customer education and outreach. The resulting Recycle Often. Recycle Right.® (http://recycleoftenrecycleright.com/) education and outreach program is a first for the industry and designed to be flexible, adaptable and customizable. The campaign takes a back-to-basics approach by focusing the messaging on three key behaviors:

1. Recycling empty bottles, cans and paper
2. Keeping food and liquids out of recycling
3. Keeping loose plastic bags out of recycling

If residents simply follow these three rules, then we should see a dramatic decrease in contamination and increase in recycling volumes in our communities.

These simple messages have been incorporated into all educational materials to ensure a consistent message is communicated effectively to customers. A Recycle Often. Recycle Right.® microsite creates a single location for campaign materials and tools with a resource page to conveniently access and download the campaign. One in every five people who make the promise to Recycle Often. Recycle Right.® also interacts with the popular Recycling Myths feature, which allows site visitors to discover whether an item is recyclable in their curbside recycling and receive an expert tip for disposal. To drive website traffic, key Recycle Often. Recycle Right.® messages have been disseminated via our national social media platforms and executed in several cost-effective advertising campaigns.

Online tools have been complemented by enhanced training for our drivers so that our customer-facing employees are delivering the same campaign messaging in the field and developing a keener eye for spotting contamination. With technologies such as truck cameras and on-board computers, our drivers play a key role in enhancing our ability to provide and report customer behavior and feedback. This also gives our local districts the tools they need to address and educate customers about contamination at the curb.
In addition, we analyzed our contracts to find opportunities to improve programs with existing customers and negotiate the right terms in future contracts. In short, the Recycle Often. Recycle Right.® message has been integrated across all of our operations and customer touch points.

**Measuring Impact**

For lasting change to occur at the curb, ongoing measurement and management is critical. That’s why we’ve created and implemented an audit procedure for our recycling facilities that allows us to capture and compare data in order to measure improvements in our contamination rates. We also instituted a program to help our teams interpret and use this data in their day-to-day planning and operations, including targeting key contaminants identified in specific communities.

**Piloting the Strategy**

Collaboration with our customers was key to both deploying the Recycle Often. Recycle Right.® program and testing it in the marketplace. In 2015, we launched pilots of the campaign in three markets across the U.S. to measure actual changes in the recycling and contamination rates in communities after program implementation. In Elgin, Illinois, the city was eager to address a 40 percent contamination rate. We worked in partnership with our customer to engage as many stakeholders as possible, including several city staff, leaders and committees, as well as Waste Management drivers. Recycle Often. Recycle Right.® messaging was pushed across multiple communication channels, including a targeted cart-tagging program, the city’s recycling webpage, a video from the mayor, a 311 message and several community events. Current reporting shows that the pilot efforts in Elgin are working, with contamination rates decreasing by 10 to 20 percent.

Early test results with our municipal customers in pilot markets show that we are having an impact. Our learnings from these pilots will inform our strategy as we begin to implement similar efforts in our 1,200-plus communities across the country.
Today’s recycling operations involve a complex flow of materials. We collect, and our facilities receive, recyclables from a variety of sources: our own trucks, city collection crews, customers and competitors. Because of the complexity of this network, we realize that it makes more sense to work with partners across the industry than to try to identify and solve business challenges on our own.

For example, we partner with Recyclebank to help drive resident awareness and participation in waste-related education programs for our municipal customers. For more than a decade, Recyclebank has been singularly focused on changing residential behaviors around waste and recycling and is one of the industry’s leading engagement platforms on waste issues. The organization uses its data-driven approach to execute three key components of its program:

- **Reach:** Connecting with residents using a multichannel approach most relevant to them, including direct marketing and community outreach to online, mobile and social media.
- **Educate:** Delivering comprehensive educational material that makes it easy to learn what and how to recycle, including fun, interactive tools that inform and inspire action.
- **Incent:** Providing multiple forms of personalized motivation that drives participation and creates life-long habits, from great deals at local and national businesses to reinvesting real dollars within the community at local schools or public libraries, to motivate residents to follow the Recycle Often. Recycle Right.® program.

Today, Recyclebank partners with more than 300 communities that are recycling nearly 3 billion pounds of materials, pledging to take 22 million green actions and earning almost $96 million in rewards value.

Other key partnerships include:

- The Recycling Partnership (TRP), a nonprofit organization funded primarily by the industry that gives grants to cities and counties for carts and public education. TRP also works closely with cities, counties and states to implement effective programs — specializing in public education around recycling “more, better.” Learn more at [www.recyclingpartnership.org](http://www.recyclingpartnership.org).
- Keep America Beautiful, which works in local communities to help teach the fundamentals of recycling to a broad consumer base. Read more on page 85.
- Industry Associations that include the National Waste and Recycling Association (NW&RA), the Solid Waste Association of North America (SWANA) and the Institute for Scrap Recycling Industries (ISRI).
Hard-to-Handle Products

Homes and businesses are filled with ordinary items and materials that require extraordinary disposal handling and recycling methods, largely due to their chemical composition.

Think paint, automotive products, swimming pool chemicals, household cleaners, flammable and combustible items, garden chemicals, batteries, consumer electronics and items containing mercury, such as fluorescent lamps, to name a few — all items that should not be placed into regular solid waste bins. We’ve developed several programs to help our residential and business customers dispose of these materials properly.

Waste Management’s At Your Door Special Collection® service provides easy and convenient collection of home-generated special materials for single and multi-unit homes in several states where logistics and customer preference support the service. As part of our home collection service, each participating household receives a collection kit with a containment bag, instruction sheet and customer service survey card, which 93 percent of customers have used to rate our service “excellent” or “very good.” In addition to at-home collection services, we also collect fluorescent lamps, batteries, sharps and non-controlled pharmaceuticals through containers placed at public locations, such as libraries, municipal buildings, pharmacies and community centers. Residents can simply place items in the collection containers, which are managed by our special collections team.

On average we collected over 100 pounds of materials from each participating household in 2015. Consumer electronics represented over 40 percent of these collections, with nonhazardous materials, such as latex paint, representing another third. Hazardous materials and universal items, such as batteries, made up the remainder. In total, we sent 86 percent of all materials to producers for recycling.

For commercial customers, we offer our Tracker service, which enables businesses to dispose of universal and special wastes through a simple, safe and compliant mail-back method. Our comprehensive program includes recycling kits for fluorescent lamps and bulbs, lighting ballasts, batteries, electronics, aerosol cans, thermometers, thermostats and dental amalgam, as well as safe disposal kits for sharps, medical waste and prescription and over-the-counter drugs. Containers, such as the patented Mercury VaporLok® packaging for fluorescent lamps, are specifically designed for safe storage and shipping via national carriers. Customers can obtain kits through our website and receive certificates that provide proof of recycling compliance via email.

“Many of our residents asked for a doorstep option. It feels good on our end (the city) to have a solution. People love the convenience and simplicity of the program.” — Anna Luke-Jones, Public Works Senior Management Analyst, City of Manhattan Beach, California

Hard to Handle, Easy to Collect

In 2015, At Your Door Special Collection® made it easy for residential customers to responsibly dispose of these hard-to-handle products.

- 54,889 ft. Fluorescent tubes equals the length of 152 football fields
- 33,453 lbs. Lead acid batteries
- 120,765 gals. Paint
- 39,967 lbs. Aerosol cans
- 17,906 gals. Flammable liquids
E-Waste

Electronic waste material — such as old or broken computers, printers, copiers, etc. — is a topic of significant environmental concern and remains the fastest-growing waste segment in North America, with more than 2 million tons generated annually in the U.S. alone.

Waste Management delivers electronic recycling solutions that are convenient to use, cost-effective and consistent with environmental responsibility. Supported by a comprehensive network of third-party processing centers certified and independently audited to the highest standards across the U.S. and Canada, our eCycling services can meet an organization’s specific needs, with secure transport options from any point in the U.S. or Canada.

All processing partner locations are audited to meet e-Steward®, R2®/RIOS certification standards and are obliged to:

» Prevent hazardous e-waste from entering municipal incinerators or landfills.
» Prevent the exportation of e-waste to developing countries.
» Provide for visible tracking of e-waste throughout the product recycling chain.

Products can be refurbished and resold for value or managed at the end of their useful life for commodity recovery. Commodities such as gold, silver, copper, plastics and more are recovered while by-products such as mercury, lead, barium and cadmium, the inherently hazardous by-products of electronics, are carefully managed. Waste Management satisfies customer compliance with consumer take-back programs in the 25 states mandating these eCycling programs, and can provide the same comprehensive management in non-legislated states as well.

New Uses for an Old Hazard

Fluorescent Lightbulbs

Waste Management offers consumer mail and pickup programs for household fluorescent lighting from commercial and industrial businesses. The lamps are delivered to Waste Management lamp recycling facilities in South Carolina and Arizona. The phosphor powder from the lamps is sent to Waste Management Mercury Waste in Wisconsin, where the mercury and rare earths are recovered and can be recycled into new products. Our mercury waste protocol includes extensive safety procedures, an entirely automated continuous flow process and a stationary system to achieve mercury and elemental recovery to the highest standards for the environment.

In 2015, we reclaimed

54,484 lbs.

of mercury and

208,711 lbs.

of phosphor powder containing rare earth minerals
Coal Ash Recycling

Air pollution regulations require particulates such as fly ash to be captured rather than emitted. The methods used to capture fly ash lead to increased carbon levels in fly ash, a by-product that is reused as a cement replacement in concrete production. Power plants use activated carbon injection (ACI) systems to remove mercury from flue gases, which is then recaptured in the electrostatic precipitators or bag houses. This process prevents mercury from escaping the smokestack into the atmosphere, but the resulting fly ash contains elevated carbon levels that negatively affect the durability of concrete. Our patented Carbon Blocker fly ash treatment system is widely used by utilities to improve the quality of fly ash, making it suitable for recycling in concrete product applications.

With more ACI systems in use today, fly ash recycling is a growing business for us. Since we acquired this proprietary technology in 2012, revenues have quadrupled, and in 2015 we beneficially utilized 1,062,203 tons of fly ash.

The Carbon Blocker Fly ash treatment system, installed directly at the plant, can convert fly ash with increased carbon levels into a cement replacement in concrete.
Organic materials, much of which are discarded food and yard trimmings, comprise approximately 40 percent of the U.S. waste stream — and Waste Management is a leader in leveraging new technologies to extract economic and environmental value from these materials.

Making more productive use of food waste is an area of particular focus not only for us, but also for a growing number of stakeholders: consumers, businesses, municipalities and regulators. Why the increasing emphasis? The opportunity is substantial, and the payoff can be significant. More than 14 percent of the material found in our trash bins today is food, yet U.S. EPA reported that in 2013 less than 3 percent of food waste was diverted from landfill. No wonder, then, that food waste, and strategies for its productive diversion, draws more recent attention than any other component of the waste stream except plastic.

It is clear that too much food is wasted at every phase of its life cycle. In fact, the Natural Resources Defense Council has estimated that 40 percent of the food grown in the U.S. is never consumed. Though many solutions focus on reducing waste upstream — in manufacturing, distribution and through donation of excess product to food banks — the largest portion of unused food ends up as food waste. There are many reasons for the growing interest in alternative solutions for managing this residual waste, in particular:

» **Food waste recycling boosts recycling goals.** As the recycling of paper and containers has increased, organics, when combined with unrecyclable paper, constitute the largest portion of the waste stream. And because this material is relatively heavy, improved processes can increase diversion percentages significantly.

» **Food waste recycling reduces methane from landfills.** The initial decomposition of food waste in landfills contributes to methane emissions. By diverting food to beneficial uses like composting and anaerobic digestion, the majority of emissions associated with initial decomposition can be negated, reducing landfill emissions.

» **The energy contained in food waste can be converted to fuel and other valuable commodities via anaerobic digestion.** New technologies are being developed to convert this material to fuels such as biogas, ethanol, methanol, diesel and jet fuel.

**Diverse Organic Solutions, Broad Capabilities**

In 2015 Waste Management processed 2.47 million tons of source-separated organic materials, including yard trimmings, food waste and biosolids — sludge sourced from wastewater treatment facilities. Most of the organic waste we collect goes to facilities that create marketable compost and soil amendment
products. Composting remains a proven, low-cost solution for managing large volumes of organic materials. Our portfolio includes 43 organics processing facilities, 40 of which have composting capability.

In addition to composting, our embrace of innovation has enabled us to create a patented centralized organics recycling process that allows organics to be digested to create biogas that can, in turn, be converted into fuel or electricity. With CORe®, we collect commercial food waste from restaurants, schools, food processing plants and grocery stores, screen it to remove contaminants such as plastic, packaging and bones, and blend the waste into an engineered slurry that has a consistency similar to cooked oatmeal. The slurry dramatically increases the production of biogas in anaerobic digesters, which is used to create renewable energy. Adding just 7 percent additional organic material in the form of engineered slurry to a water treatment plant’s anaerobic digesters can increase energy output by more than 70 percent. After initially piloting the CORe® process in New York City and Orange County, California, we built out full-scale commercial facilities at both sites and will open our third commercial plant in Boston in Fall 2016.

A Higher Level of Stakeholder Engagement
While our core competencies center on productive processing of waste food at end of life, we continue to work with a broad range of stakeholders on holistic solutions to address the challenge of reducing food waste at every phase of its life cycle. In 2015 we partnered in several important national efforts around food waste. These included providing advisory services to ReFED — a Roadmap to Reduce U.S. Food Waste by 20 Percent. This valuable study assessed the entire value chain from production through end of life and identified specific strategies to cut food waste nationally by 20 percent, saving up to 18 million tons of GHG emissions annually. In 2015 we also participated in the U.S. EPA/Southeast Recycling Development Council’s Food Recovery Summit, which convened participants from throughout the value chain to devise strategies to reduce food waste. This effort included pledging to expand our efforts to help reduce and recover wasted food. And our own Spectrum Project was undertaken to perform a detailed analysis of the GHG emissions associated with recycling, yard waste composting and the anaerobic digestion of food waste.

An Evolving Regulatory Landscape
Statutory requirements and municipal ordinances regulating the disposal of food waste are important drivers of the expansion of successful organics diversion programs. Once in place, these requirements create the conditions to dramatically increase the diversion of organic material. Food waste regulations in the Vancouver Metro area of British Columbia have led to significant growth in diversion efforts in the region. For example, in the City of New Westminster, a Vancouver suburb, we have worked closely with city officials to provide a comprehensive food waste collection program in the community’s more than 500 multifamily residential complexes, as well as single-family residences. The program included extensive educational efforts for residents and specialized containers and collection programs. In the first year alone, the program diverted nearly 1,000 tons of organic materials from landfill. As increasing numbers of cities take action on their own, we stand ready to work in partnership with local stakeholders to continue to expand organics diversion.
Organic Waste At-A-Glance

U.S. Waste Stream

14.5% of material in trash bins is food

28% food and yard waste combined makes up the largest portion of today’s waste stream

40% of food grown in the U.S. is never consumed

<3% of food waste is diverted from landfill

Waste Management

2.47 million tons of source separated organic materials processed in 2015

43 organics processing facilities, including 40 compost facilities

700,000 residential households participate in food waste collection, many on the West Coast where policies include food waste diversion

1,000s of commercial customers separate their food waste for collection

8,000 tons of food waste converted to renewable fuel using CORE® technology in 2015
Waste-Based Energy

While diversion of waste to recycling and other forms of reuse are central to our environmental strategy, it is clear that not all materials can be successfully processed in this manner. Yet even as waste reaches the landfill, there remains a meaningful opportunity to recapture value. There, as organic material decomposes in an anaerobic environment, it naturally produces methane, a major component in natural gas fuel and also a potent GHG.

At our landfill gas-to-energy (LFGTE) facilities, we capture this methane and use it beneficially as an alternative to fossil fuel. We harness this energy to power homes and provide fuel for industrial uses and commercial vehicles, including our own. The U.S. EPA endorses landfill gas as a renewable energy resource, putting it in the same category as wind, solar and geothermal resources. Since 2007 our fleet of LFGTE facilities has expanded by more than 25 percent; in 2015 we operated 136 projects of various types that produce energy at 126 landfills. Today Waste Management is the largest LFGTE developer and operator in North America, with projects generating the equivalent of more than 4.6 million megawatt-hours per year, enough to power 470,000 homes and equivalent to replacing the need for burning 2.5 million tons of coal annually.

A Diverse, and Growing, Fleet of Renewable Energy Assets

Our most frequent application for collected landfill gas is to use the processed methane to generate electricity, fueling dedicated generators that produce electricity for sale to public utilities, municipal utilities and power cooperatives. 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 transportation.

Renewable natural gas produced from processed landfill gas now fuels 40 percent of our natural gas trucks. The Milam Renewable Natural Gas Facility in Fairmont City, Illinois, commissioned in March 2015, is our third landfill gas to natural gas fuel facility (Altamont, California, has been operational since 2009, and American produced renewable electricity via pipeline gas before it began offsetting vehicle fuel with renewable natural gas fuel in 2015). Milam features some of our most advanced capabilities to close the loop and create a truly circular economic use of this resource. We invested $19 million in this facility, which processes the raw landfill gas by removing the carbon dioxide, nitrogen and oxygen...
The Milam Process: Innovation That Closes the Circle

CNG Collection Trucks pick up waste at homes and businesses. After recyclables are separated, the remaining waste is transported to landfills for permanent disposal.

Much of landfill waste is organic, including food and cardboard. Bacteria digest this material, producing methane and carbon dioxide as natural byproducts.

Methane is recovered by a series of wells drilled into the landfill. The wells are interconnected to form a collection system.

The collection system transports the gas to a standard compression facility where it is dewatered, filtered and pressurized.

Electricity generated at the power plant is sold to the grid and connected to the Renewable Gas Facility.

The compressed methane is directed to an on-site power plant with three 1,160 horsepower reciprocating engines and a generation capacity of 2.4 megawatts.

The facility can process up to 3,500 standard cubic feet per minute (SCFM) of incoming landfill gas, producing high-purity methane that is injected into an adjacent natural gas pipeline.

The remainder of the gas is routed to the Renewable Gas Facility for advanced processing to power compressors and other equipment at an on-site power plant. Carbon dioxide, nitrogen and oxygen are removed from the gas to produce high-purity methane that meets natural gas pipeline specifications.

The Milam facility produces enough Renewable Natural Gas to fuel up to 400 Waste Management CNG collection trucks each day, reducing GHG emissions by more than 80 percent compared to those powered by diesel fuel.

The facility can process up to 3,500 standard cubic feet per minute (SCFM) of incoming landfill gas, producing high-purity methane that is injected into an adjacent natural gas pipeline.
to produce high-purity methane that meets natural gas pipeline specifications. The compressors, dehydrators and other equipment necessary to process the landfill gas were powered by electricity from on-site landfill gas-fired generators. This equipment was converted to run on natural gas in May 2016 to make more landfill gas available to the processing plant to produce renewable natural gas. The renewable gas is then compressed and injected into an adjacent natural gas pipeline, operated by Ameren Illinois, a local utility that provides electricity and gas delivery. The renewable fuel production is used to offset natural gas consumed by approximately 200 Waste Management CNG collection trucks operating at this site.

## Landfill Gas Beneficial Use Projects

<table>
<thead>
<tr>
<th>TYPE OF PROJECT</th>
<th>PROJECTS</th>
<th>MEGAWATTS</th>
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</thead>
<tbody>
<tr>
<td>Electrical Power</td>
<td>103</td>
<td>540</td>
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<tr>
<td>Pipeline to Off-Site Power</td>
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<td>67</td>
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<tr>
<td>Pipeline to Medium BTU Fuel</td>
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<td>33</td>
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<tr>
<td>Liquid Waste Disposal</td>
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<tr>
<td>High BTU Natural Gas Production</td>
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<tr>
<td>Vehicle Fuel Projects at WM Landfills</td>
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<tr>
<td><strong>Total Projects</strong></td>
<td><strong>136</strong></td>
<td><strong>684</strong></td>
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### Expanding Our Commitment to Solar

The large geographic footprint of landfills and their proximity to existing infrastructure can make them ideal locations for large-scale solar installations. We continue to increase our commitment to solar generation, a strategy that is aligned with U.S. EPA’s RE-Powering America’s Land initiative. First launched in 2008, this innovative federal program has resulted in nearly 180 new installations that have been installed on contaminated lands, landfills and mine sites, with a cumulative installed capacity of just over 1,124 megawatts nationwide.

In New Jersey we have partnered with Public Service Electric and Gas Company (PSE&G) to bring online the L&D Landfill Solar Farm, which was completed and interconnected to the grid in 2015. With some 41,720 solar panels covering 53 acres of landfill space spanning the towns of Easthampton, Lumberton and Mount Holly, New Jersey, it is one of the largest landfill solar farms in the United States. The 12.93 megawatt facility generates enough electricity to power 2,000 average-size homes. We built upon our experience with this New Jersey initiative and we undertook new solar generation projects at four closed landfills in Massachusetts. This effort, in collaboration with the Massachusetts Department of Environmental Protection and Citizens Energy Corporation, has resulted in an additional 17 megawatts (DC) of clean, renewable solar power. Our goal for end of 2016 is generation of 40 megawatts of power from our solar fleet on closed facilities. For more information on our solar projects, please see page 57.
Innovation

It’s often said that waste is simply a resource out of place. That’s the idea behind a series of investments we have made over the past decade in companies focused on transforming certain materials in the waste stream into materials of higher value. Our venturing team has created a portfolio of investments that matches our business strengths with broader market opportunities. For several of these investments, we already have graduated from pilot and demonstration phases to “commercialization,” where the technology is ready to grow to a full, large-volume production scale. Following is an overview of these investments.

**Fulcrum BioEnergy, LLC**
Fulcrum processes municipal solid waste (MSW) into an engineered feedstock, which they gasify and convert into renewable crude. This renewable crude can then be further refined into low-carbon, drop-in jet and diesel fuels. A part of our portfolio since 2011, Fulcrum is constructing its first commercial plant near Reno, Nevada, and will be operational in 2018. This plant will convert approximately 550 tons per day of MSW-derived feedstock, most of which we will supply, into 800 barrels of renewable crude per day.

**Enerkem Alberta Biofuels**
Enerkem converts non-recyclable MSW into clean fuels and renewable chemicals. Enerkem Alberta Biofuels is the world’s first commercial biorefinery to use MSW to produce methanol and ethanol. This facility in Edmonton, Canada, began producing methanol from waste in 2015 and has a potential annual output of 10 million gallons of biofuels used for transportation, or renewable chemicals for everyday product applications. The company plans to develop similar facilities in North America and abroad.
SpecFUEL®
We continue to explore innovative ways to harvest the thermal energy from residual material that arrives for disposal at our landfills. SpecFUEL is a highly engineered fuel devised for use in industrial boilers and kilns. In these applications it can be used to supplement — or replace — fossil fuels such as coal and petroleum coke. SpecFUEL is composed of 99 percent or greater postrecycle paper, cardboard and plastics in rigid, foam and film form. It is produced using a 13-step process involving sophisticated sorting equipment that removes recyclable metals, organics, PVC plastic and inert materials that are unsuitable for fuel. The remaining paper and plastic materials are then transformed into uniform, high-quality, high-energy fuel.

SpecFUEL possesses a significantly lower sulfur content than coal. Employing it as a replacement can cut emissions of air pollutants and reduce GHG emissions by 15 percent on a lifecycle basis. SpecFUEL production from a single plant can result in annual energy savings of the equivalent of more than 160,000 tons of coal, the energy equivalent of powering more than 39,000 homes for one year. Our SpecFUEL plant in Philadelphia is an important part of the city's sustainability initiatives. Nationwide in 2015 we produced and sold some 3,650 tons of this material.

Since opening the plant in Philadelphia in 2014, we’ve continued to sell SpecFUEL product to cement kilns and commenced a combustion trial with an independent power producer. We’ve also formed a joint venture, SpecFUEL Partners, LLC, to pursue the development of additional plants and for which we will provide feedstock and residuals management.

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>SPECFUEL</th>
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<tbody>
<tr>
<td>Heat Value (BTU)</td>
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<td>8,000 – 14,500</td>
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<tr>
<td>Moisture Content (Percentage, by weight)</td>
<td>10 – 20</td>
<td>2 – 20</td>
</tr>
<tr>
<td>Ash (Percentage, by weight)</td>
<td>2 – 15</td>
<td>3 – 16</td>
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<tr>
<td>Sulfur (Percentage, by weight)</td>
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<td>0.5 – 4.7</td>
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<tr>
<td>Halogen (Percentage, by weight)</td>
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<td>0.01 – 0.9</td>
</tr>
<tr>
<td>Density (Pounds / Cubic Foot)</td>
<td>~ 20-24</td>
<td>~ 81.25</td>
</tr>
</tbody>
</table>

ENVIA Energy
In 2015, we entered into a joint venture partnership with Velocys, PLS, to create Envia Energy and announced the groundbreaking for its first gas-to-liquids (GTL) plant, located adjacent to our East Oak landfill site in Oklahoma City. Commercial operation is expected in 2016. Renewable, ultra-clean fuels and chemicals produced by the plant will deliver significant lifecycle GHG reductions over conventionally produced fuels. The project is at the forefront of smaller-scale gas-to-liquids (GTL) technologies that turn natural gas into premium liquid products. Smaller scale GTL adds value to shale gas and makes use of stranded or flared gas more economical — an untapped market of up to 25 million barrels per day. Velocys technology, protected by over 900 patents, can be used to unlock gas resources of 15,000 to 150,000 MMBtu per day.
The PGA TOUR’s Biggest Event Is Also the Greenest

The goal is ambitious: host more than a half million spectators at a week-long athletic event while producing zero waste. For this event, “waste” is not just solid waste, but it includes wasted natural resources such as water, energy and carbon. Using internationally recognized methodologies and frameworks from ISO 20121 Sustainable Event Management and the Global Reporting Initiative, we continuously achieve outstanding success that is verified by third parties.

UL Environment has verified our claims with their Zero Waste to Landfill Operations with 10 percent incineration with energy recovery validation. We received the Council for Responsible Sport’s highest level of certification for our sustainability initiatives: Evergreen. For the last six years and the next nine years, the Waste Management Phoenix Open (WMPO) in Scottsdale, Arizona, is a platform to showcase best practices and innovation in sustainable sport, which easily transfer to our customers’ businesses and even their personal lives.

In 2013 we established a zero waste challenge for WMPO. It has been the first sporting event of its kind to reach such an ambitious sustainability objective — earning the description “The Greenest Show on Grass.” In 2015, for the third consecutive year, we achieved our “zero waste” goal, diverting all 444 tons of waste material from landfill to recycling, composting, energy generation and charitable donations. In 2015 we continued to improve on all of our sustainability initiatives as we moved from Council for Responsible Sport Gold Certification to Evergreen — the largest event to achieve this level of certification and also the only golf tournament.

Zero-waste success requires a well-thought-out, holistic approach to every aspect of tournament operations — from the deployment of signage to the management of food and beverage operations to the collection and environmentally responsible handling of waste materials. In place of trash receptacles, more than 6,000 recycling and composting bins were deployed throughout the course. Once they were removed from the event site, waste streams were carefully scrutinized, with materials sorted using
state-of-the-art optical sensing equipment. After sorting, recyclables were baled and food-related waste was sent to a nearby compost facility. More than 30,000 pounds of unused perishable food was donated to local nonprofits. We are committed to transparency and third-party review, and our zero-waste results were validated by two outside parties: UL and the Council for Responsible Sport. UL’s report noted that in 2015 the WMPO continued to improve on its methods of diversion while achieving “Zero Waste to Landfill Operations with 10 percent incineration with energy recovery.” Indeed, in 2015 use of waste-to-energy was 9.1 percent.

In addition to waste diversion, water conservation is another critical priority at the WMPO, which is located in a Southwest desert community where water is considered a scarce resource. At the 2015 event, fresh water usage was reduced by almost 29,000 gallons compared with the previous year. An initiative to reuse graywater from cooking and cleaning in portable toilets collected a record 6,100 gallons for reuse. We have also launched the WMPO Water Campaign with the nonprofit organization Change the Course (changethecourse.us), a first-of-its-kind water sustainability campaign that supports water flow restoration projects in Northern Arizona’s Verde River and other rivers that extend from the Colorado River Basin. Using social media, the WMPO encouraged tournament attendees and followers to pledge to conserve water in their daily lives. One pledge equates to restoring 1,000 gallons of water back into the Colorado River Basin. To date, WMPO has supported the restoration of more than 35 million gallons.

Change the Course also benefits monetarily from WMPO through our fundraising partnership with the Thunderbirds, the Phoenix Chamber of Commerce committee that hosts the event. In honor of the Open’s unofficial status as the greenest tournament on the PGA TOUR, each person who wears green on the Saturday of the Open triggers a donation to local recycling and environmental organizations. In 2015, the WMPO raised a record $9 million to benefit projects such as Change the Course and other local causes. In total, Waste Management and the Thunderbirds have raised more than $36 million since our sponsorship began in 2010.

As title sponsor, our goal is to set a high standard by operating a large, high-profile event waste-free – but our ambitions go even further. We utilize WMPO as an opportunity to share ideas with consumers, suppliers and corporate partners to showcase the approaches they can use to reduce their own environmental impacts — 24/7/365. Vendor meetings are held and guidelines distributed to explain what types of materials can be used at the event. Nearly 200 volunteers received training in 2015 to help spectators properly dispose of their waste. A key point of communications emphasis to attendees was to exercise the opportunity to recycle RIGHT. Printed reminders and hands-on assistance by volunteers helped reinforce the message to avoid contamination when recycling waste materials.

Concurrent with the tournament, we host the Waste Management Executive Sustainability Forum, a high-level discussion that attracts senior business executives and leaders from government as well as NGOs. The Forum provides an opportunity to create an open dialogue concerning sustainability principles, best practices and effective strategies to achieve bottom-line results. In 2015 the Forum saw a 23 percent increase in attendance over the previous year and reached almost 31,000 viewers through online engagement.

Our efforts — and those of our partners, spectators and other stakeholders — to operate the 2015 WMPO at a high level of environmental performance are described in the WMPO Sustainability Assessment Report, utilizing the GRI reporting framework, available at http://www.wm.com/thinkgreen/pdfs/2016WMPOsustainabilityReportUpdate.pdf.
The PGA TOUR’s Largest — and Greenest — Golf Tournament

- Water restored to the Colorado River Basin and Verde River through the WMPO Water Campaign: 35 million gals.
- Fencing, carpet, turf and banners donated for reuse: 25,000 lbs.
- Unused food donated to local nonprofits: 30,000 lbs.
- Recovered waste per attendee: 1.8 lbs.
- Attendees: >560,000
- Total charitable donations: >$9 million
- Total GHG emissions avoided from recycling, composting and waste-to-energy: 350 metric tons
- Electricity supplied from renewable sources: 100%
- Metered water used per attendee: 11 oz.
- Graywater re-used in portable toilets: 6,100 gals.
4.0 Operations

Safe Landfills 53
Energy & GHG Footprint 55
Fleet 58
Water Conservation 61
Waste Management provides solid waste collection services to more than 21 million customers in North America — from households to public venues to large companies. All told, after recycling or diverting various materials for reuse, we safely manage the disposal of nearly 100 million tons of waste annually, including common municipal trash and highly specialized materials such as medical and industrial waste. To handle this volume, Waste Management operates the largest network of landfills in our industry and works hard to minimize the impact of those facilities on neighbors and the environment.

Modern landfills are the products of sophisticated engineering, providing both secure containment systems for the disposal of waste and the opportunity to capture value through the conversion of waste to energy. Waste Management’s modern landfills in the United States were developed under the federal Resource Conservation and Recovery Act (RCRA), which requires rigorous siting evaluation, site characterization and scientific engineering design, as well as a comprehensive permitting and regulatory approval process that includes public notification and comment. RCRA standards also require a range of measures to prevent environmental contamination, including the use of engineered liners and covers, collection and control systems for landfill gas, and collection and treatment systems for leachate (water that accumulates in and filters through waste).

Our modern sites are designed and operated to ensure that our landfills go beyond regulatory requirements. We continually monitor and work to improve the safety and environmental security of our disposal facilities, and are committed to reporting the results of these efforts. We strive to avoid conditions that cause concern for neighbors and communities, including odors and noise, regardless of whether those conditions are covered in our regulatory obligations. We also work with waste sector experts to understand what happens within landfills after they are closed. Studies have shown that modern municipal solid waste landfills tend to improve predictably over time, steadily producing less gas and less (and cleaner) leachate. Many of our landfills are designed and managed to ensure they can be used after closure for commerce, industry or even conversion into wildlife habitat or public parks.
Protecting Surface Water and Groundwater
Waste Management utilizes extensive engineering controls and practices to protect surface water and groundwater, and we're always seeking ways to improve upon these. We maintain a comprehensive network of more than 6,000 groundwater-monitoring wells around our facilities, and every landfill uses monitoring strategies (many involving sophisticated statistical evaluations) to ensure that water quality in adjacent surface water and groundwater bodies is not impacted. We are pleased to report that our modern municipal solid waste landfill liners continue to perform as designed, not allowing leakage through the liner that would require corrective action to clean up groundwater under neighboring properties. To make sure that remains the case, we employ a staff of nearly 200 professional engineers, environmental scientists, regulatory experts and technicians who ensure that every facility works to protect surface water, stormwater and groundwater from any potential operational impacts.

We use managed basins, tanks, containment structures and separators to redirect for proper disposal and treatment any contact water that is created. We also audit our on-site wastewater treatment plants to optimize efficiency and utilize a toolkit of best management practices for our field operations. This toolkit has facilitated the reduction of water that comes in contact with waste or contaminants.

Providing Safe Disposal of Pharmaceuticals
Not all waste is created equal. The disposal of certain materials requires more care. Our PharmEcology® Services program provides safe pharmaceutical waste disposal to the healthcare industry, including acute care hospitals, clinics, surgery centers and long-term care facilities. Properly destroying and disposing of these drugs ensures that they do not create damage to the environment or provide opportunities for drug abuse. In 2014 and 2015, our program diverted more than 1.5 million pounds of waste pharmaceuticals from damaging practices such as dumping pharmaceuticals into the sewage system.
We are transforming our business model to seize opportunities to compete in tomorrow’s climate-constrained world. Each day, our customers look for our help to reduce their greenhouse gas (GHG) emissions, and this is also a strategic imperative for our business.

We continue to expand the productivity of our recycling operations and explore the many options to reduce our footprint. This includes:

» Producing low-carbon fuels from waste;
» Transitioning our fleet steadily to lower-carbon fuels;
» Improving energy efficiency; increasing our use of renewable energy; and
» Providing climate-related sustainability consulting services to customers who want to improve tracking, reduce their carbon footprints, and/or prepare for potential carbon cap-and-trade or tax-fee scenarios.

Our energy and GHG sustainability goals are deeply integrated into our business strategy and attempt to guard against the issues created by climate change, such as the need for adaptation to physical climate parameters and regulatory changes.

Our Industry’s Footprint
Overall, the waste sector is a very small contributor to U.S. GHG emissions, with emissions from landfills, wastewater treatment and composting accounting for just 1.9 percent of total U.S. GHG emissions in 2012. Net methane emissions from landfills have decreased since 1990 as a result of a 21 percent decrease in the amount of decomposable materials such as paper and paperboard, food scraps and yard trimmings discarded in landfills, as well as increases in the amount of landfill gas collected and combusted.

Waste Management’s GHG Footprint
We were the first major company in our industry to comprehensively assess the GHG footprint of all our facilities in North America over which we exercise ownership or operational control. Since 2004, we have participated in the Carbon Disclosure Project (CDP), and for the past seven years, we have updated our comprehensive carbon footprint and tracked our progress in reducing it. In 2014, we were recognized as leaders in reporting transparency on the CDP S&P 500 Climate Disclosure Leadership Index.

Our direct emissions have varied over time due to a variety of factors. The divestiture of Wheelabrator Technologies in late 2014, for example, reduced our direct emissions significantly. Importantly, in 2015, the GHG reduction services we offer our customers — recycling, landfill gas renewable natural gas projects, landfill gas-to-energy projects and carbon sequestration in landfill — helped them avoid over three times the GHG emissions generated all year by Waste Management.¹

See pages 109-111 for a closer look at our GHG footprint and a description of the methodology we use.

GHG Footprint

<table>
<thead>
<tr>
<th>GHG FOOTPRINT (Metric Tons CO2 Equivalents)</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process²</td>
<td>17,662,765</td>
<td>17,286,709</td>
<td>14,329,849</td>
</tr>
<tr>
<td>Transportation</td>
<td>1,745,919</td>
<td>1,737,741</td>
<td>1,733,174</td>
</tr>
<tr>
<td>Energy Use</td>
<td>355,015</td>
<td>435,633</td>
<td>438,771</td>
</tr>
</tbody>
</table>

POTENTIAL AVOIDED GHG EMISSIONS FROM (Metric Tons CO2 Equivalents)

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable energy generation</td>
<td>5,635,643</td>
<td>4,587,712</td>
<td>1,040,041</td>
</tr>
<tr>
<td>Reuse and recycling of materials</td>
<td>31,613,385</td>
<td>35,901,171</td>
<td>33,777,090</td>
</tr>
<tr>
<td>Carbon permanently sequestered</td>
<td>16,126,208</td>
<td>16,836,940</td>
<td>17,683,620</td>
</tr>
</tbody>
</table>

2015 Emissions

<table>
<thead>
<tr>
<th>METRIC TONS CO2E</th>
<th>CANADA</th>
<th>U.S.</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>953,619</td>
<td>15,203,048</td>
<td>16,156,667</td>
</tr>
<tr>
<td>Scope 2</td>
<td>13,946</td>
<td>220,055</td>
<td>236,273</td>
</tr>
<tr>
<td>Scope 3 (purchased goods and services; capital goods; fuel- and energy-related activities; business travel; employee commuting; downstream leased assets)</td>
<td></td>
<td></td>
<td>9,266,636</td>
</tr>
</tbody>
</table>

¹Note that if sequestration is not counted, we avoid twice the GHG emissions we generate in our operations.

²Due to our divestiture of Wheelabrator Technologies at the end of 2014, our process emissions have been adjusted. According to the GHG Protocol, emissions from Wheelabrator Technologies should be removed from all years, and we have done so here.
Leadership & Engagement

To face climate challenges head-on, we marry strategic business planning with lifecycle thinking, evaluating how GHG emissions can be eliminated or sharply reduced. We collaborate with the U.S. EPA to support its Sustainable Materials Management framework, which works to reduce climate change impacts through recycling and other waste diversion strategies. We also sponsor the Sustainable Materials Management Coalition, which focuses on how lifecycle thinking can improve the GHG-reduction performance of recycling.

Waste Management has been an early adopter of strategies to address climate change. We were a Climate Action Leader in the California Climate Action Registry, which was succeeded by the Climate Action Registry (CAR), for which we are a GHG offset developer. We were an early participant in CAR, having generated our first verified GHG offsets under the CAR protocols in 2011. In addition, we are an Emissions Performance Generator under the Alberta Environment GHG Reduction Program, where we elected to approach compliance for our one subject landfill facility aggressively — instead of paying an emissions fee or buying offsets, we installed a landfill gas collection system to reduce GHG emissions from the site. We also support mandatory carbon reporting and have worked extensively with U.S. EPA to enhance estimations of methane reductions in landfill cover. Finally, we are a member of the Business Council on Sustainable Energy, which is dedicated to implementing market-based approaches to reducing pollution and GHG emissions by providing a diverse, secure mix of energy resources, including renewable energy, for consumers and businesses.

Energy Conservation and Renewable Energy

Waste Management is both a major supplier and a user of renewable energy, increasingly utilizing sources such as wind, solar, waste heat and landfill gas to power our facilities. Read more on pages 44 & 62. Since our energy use costs are generally equal to about 3 percent of our total revenues, we also encourage energy efficiency and conservation initiatives throughout our company.

In 2015, we hosted the generation of 289,000 MWh of energy from wind, avoiding 111,000 MtCO2e. We continue to look for opportunities to use 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. With the New Jersey Department of Environmental Protection and New Jersey-based electric utility Public Service Enterprise Group (PSEG), we hosted the installation of a 12.9323 megawatt-dc solar farm at the L&D Landfill and a 10.1 MW facility at the closed Parklands Landfill. As one of the largest land-based solar farms in the United States, this 41,720-panel, 53-acre solar farm is now actively supplying enough energy to power 2,000 average-size New Jersey homes. In 2016, we will build upon our successes in New Jersey by working with the Massachusetts Department of Environmental Protection and two strategic partners, Citizens Energy Corporation and Southern Sky Renewable Energy, to redevelop four closed landfills, resulting in an additional 17 megawatts of solar power.
Our fleet of more than 32,000 collection and support vehicles is one of the most visible symbols of our company. In 2007 we made a commitment to reduce the carbon dioxide emissions and improve the efficiency of our on-road fleet vehicles by 15 percent. To achieve this goal, we began transitioning to cleaner vehicles and fuels, as well as minimizing the number of miles our trucks travel each day. As a result of these focused efforts, we achieved our goal by 2011 and since then have continued to work toward further emissions reductions and routing efficiency improvements.

Transitioning to Natural Gas Vehicles
One of our primary strategies for reducing emissions is to transition our fleet of 18,500 collection vehicles from diesel to cleaner-burning natural gas. In fact, we’ve been a pioneer in natural gas since the early 1990s. Today, we have more than 5,000 natural gas collection trucks on the road, which makes us the largest private vocational heavy duty fleet user of natural gas in the nation.

We continue to expand this fleet with up to 90 percent of new trucks purchased in 2015 running on compressed natural gas (CNG). For every diesel truck replaced with natural gas, we reduce our use of diesel fuel by an average of 8,000 gallons annually and GHG emissions by 22 metric tons per year, which equates to a 21 percent GHG emissions reduction per truck. Natural gas–fueled trucks are also quieter than diesel and cut smog–producing nitrogen oxide emissions by up to 50 percent compared with the cleanest diesel trucks. In total, we’ve invested more than $1 billion in natural gas transportation innovation over the last two decades.
Where possible, we use renewable natural gas to fuel our trucks. Renewable natural gas (RNG) is a natural gas produced from biogas generated at landfills or anaerobic digesters. In total, nearly one third of our fleet uses biogas and 100 percent of our fleet in California runs on renewable natural gas. Nationwide, 36 percent of our natural gas fleet runs on biomethane. Learn more about how we create biogas on page 41.

Hybrids are another means of reducing emissions in our fleet. In recent years, we have been transitioning diesel-powered bulldozers, which are important pieces of equipment used at our landfills, to diesel-electric hybrid machines. Currently, we operate the world's largest fleet of Caterpillar D7E bulldozers, which run on a smaller diesel engine powered by an electric generator. Our 30 diesel-electric bulldozers burn nearly 50 percent less fuel per hour than their predecessors.

Finally, we work with the U.S. EPA’s SmartWay Transport Partnership, which assists companies seeking to make improvements in their fleets’ environmental performance and provides models for tracking fuel consumption and efficiency. We have been a member since 2010 and were the first company with a vocational fleet (e.g., construction, utility, refuse vehicles) to become a SmartWay Partner.

**Producing and Providing Fuel**

Our transition to a natural gas fleet is dependent upon the existence of fueling stations that support these types of engines. That’s why a core element of our fleet transition strategy has been to build our own fueling infrastructure — both to refuel our own vehicles, as well as to sell compressed natural gas (CNG) to other commercial fleets and individuals. We continued to grow our natural gas fueling infrastructure in 2015, opening 12 natural gas fueling stations for a total of 84 fueling stations in the United States and Canada as of the first quarter of 2016, with 30 percent of these stations open to the public.

In partnership with our CNG station manager PetroCard, many of our stations are open to the general public in Arizona, California, Florida, Illinois, Kentucky, Maryland, Minnesota, New Jersey, New York, Pennsylvania, Tennessee, Utah and Washington state. Several of our other stations provide access for fueling by municipal bus fleets or other third parties.

We also have plants that convert landfill gas into natural gas for use in vehicles — thereby powering trucks with the very waste they are collecting. For instance, at the Altamont Landfill in California in 2005, we collaborated to build the world’s largest plant to convert landfill gas to liquefied natural gas (LNG), a completely renewable fuel. The plant produces up to 13,000 gallons of Renewable LNG per day and helps to power truck fleets — ours and others’ — in California. What’s more, LNG represents a 90 percent reduction in GHGs as compared with diesel. Since its creation, the plant has produced more than 16 million gallons of LNG for use in trucks. We also operate an on-site renewable natural gas facility at our Milam Landfill in Illinois and American Landfill in Ohio, which convert landfill gas into pipeline-ready natural gas that offsets the natural gas fuel used in our fleet. Milam can support 470 trucks at current production levels; American can support up to 400 trucks.
Reducing Truck Miles
Another key strategy for reducing emissions from our fleet involves using new technologies to reduce the miles our trucks need to travel. Our Service Delivery Optimization (SDO) initiative helps us streamline routes for our fleet, cutting the amount of fuel we need and lowering our carbon footprint. As of the end of 2015, 100 percent of our main lines of business vehicles had been optimized with SDO. We have found that marrying technology — such as our Efficiency Management and Planning (EMAP) on-board computing system — and logistics management processes with the skill of our drivers allows us to cover routes more efficiently. One key part of SDO is DriveCam®, a video recorder mounted on the windshield of our collection vehicles that is automatically activated by sudden movements (e.g., hard braking, sudden acceleration). In some districts, we see the potential to save as much as 8 percent on fuel by coaching drivers on proper acceleration, deceleration and speed limits. You can learn more about DriveCam on page 75.

We pursue innovative ways to eliminate unnecessary collection trips altogether. For example, our self-powered solar compactor uses internal sensors to determine when trash needs to be compacted, thereby giving each 35-gallon receptacle a 180-gallon capacity. When the compactor is full, it wirelessly signals for pickup. The solar compactor reduces the number of collection trips — and associated transportation emissions — required for each receptacle, which is especially valuable in high-traffic public areas and urban centers.

Similarly, our convenient Bagster® service eliminates the need to send a truck to deliver an empty container to customers by offering compact containers for sale at more than 4,000 retail locations across the United States and Canada. Bagster is strong enough to hold up to 3,300 pounds of debris or waste, making it suitable for anything from home renovations to disaster cleanup. When customers are finished with their projects, Waste Management can collect up to 15 full Bagsters on a single, efficient collection route.
We recognize that fresh water supplies are an increasingly scarce resource in our world. Though our operations are not relatively water intensive, we nevertheless work to use water sparingly and responsibly in our operations. Primary water uses include dust control and soil compaction at our landfills; cleaning and maintenance in our fleets; and drinking and sanitation in our facilities.

Since our facilities are spread throughout North America, water-risk assessments are conducted regionally and sometimes locally, depending on the risk level for potential water scarcity. Using the World Business Council for Sustainable Development’s Global Water Tool, we have found that 27 percent of our market areas, comprising approximately 840 facilities, are located in water-stressed regions.

Water-related weather patterns also present another risk. Because land-based facilities are exposed to the elements, landscape vegetation can be a challenge in times of drought or flood — and virtually all our landfills in North America are vulnerable to these weather events. Flooding can impede the collection of landfill gas by filling collection wells with water, while drought can reduce the rate of the process of organic material decay, for which water is essential. This creates roadblocks for the productivity of the landfill gas-to-energy portion of our business.

Tracking Our Usage
We are planning to develop a more systematic approach to data collection and, at the same time, better understand our water use by establishing a consumption baseline based on our actual use. Our water scarcity mapping primarily uses the World Business Council for Sustainable Development global water tool and the World Resources Institute water stress definition to identify vulnerable areas where our facilities and operations are located. This is done through our proprietary GIS service mapping called WAVE. We use Leadership in Energy and Environmental Design (LEED) guidelines to estimate potable water use based on “gallons per employee per day” methodology.

Our water management practices have been enhanced recently through the use of a third-party vendor to provide a higher level of oversight into our utility data that helps sites better measure and manage consumption. The vendor notifies facilities when there is an unexpected consumption spike or higher-than-normal usage. For example, a deviation report was sent to alert our Mill Seat Landfill in Bergen, New York, of a spike earlier this year. As a result, the landfill was able to identify the issue immediately, replace a malfunctioning valve, and monitor its effectiveness.
Mitigating Water Impacts
Our approach to water conservation is guided by our company-wide conservation policy, which counsels facilities to consistently look for opportunities to reduce our water usage. These opportunities include:

» Installing high-efficiency plumbing fixtures during building retrofits and fixture change-outs.
» Reducing the amount of water needed for landscape irrigation at facilities.
» Using rainwater and nonpotable water to wash trucks and control dust.
» Installing biotreatment systems at some facilities to capture and reuse 100 percent of the water used to wash our trucks.
» Reusing reclaimed wastewater in boilers for steam turbines at select renewable energy projects.
» Using wastewater instead of potable water when constructing landfill units, where environmentally appropriate and allowed under state regulation.

We also review facility design and operation in areas potentially prone to flooding to avoid impacts on operations. In addition, we have a program of best practices and protocols to minimize the potential for rain to come into contact with waste materials.

In addition to conserving water, Waste Management works to maintain or improve the quality of local water supplies and to replenish subsurface water supplies. In some instances, we use methods such as reverse osmosis purification to treat and return water from industrial use into the environment at drinking-water quality and, at some facilities, we design "zero discharge" stormwater management infrastructure (e.g., infiltration galleries, percolation basins).

Making Our Buildings More Sustainable
Our efforts to conserve water and energy and use renewable energy come together in our buildings, where we implement a range of sustainability practices to reduce environmental impacts, improve operational efficiencies and achieve cost savings. Although only some of our facilities are certified under the U.S. Green Building Council’s LEED standards, we usually build to LEED standards, regardless of whether we seek certification. Read more about our LEED-certified sites on page 113.

Our Austin Community Landfill in Texas uses recycled water under high pressure to remove mud from truck tires before the vehicles enter nearby public roads. Water from the tire wash system is directed into a large concrete collection basin, and impurities are removed before the water is reused.
Waste Management provides services to more than 21 million customers — a big job. But we do it one city, one neighborhood, one business and one home at a time. This makes us an integral part of every community where we operate. We have a stake in helping to make our cities, towns and counties better places in which to work and live — not just for today, but for the future.

We can’t play this important role in the community without the daily contributions of our over 40,000 employees. The success of each employee is what enables Waste Management to succeed, and we strive to give our employees the tools they need to develop and excel in their careers.

Our commitment to our employees and our communities is underpinned by our values. For the last nine years, we have been included on Ethisphere Institute’s “World’s Most Ethical Companies.” Since 2008, we have been the only environmental services company included.
Fostering mutual trust and respect for one another is a cornerstone of being an inclusive and welcoming workplace — one that is well-positioned to serve our customers and communities. It’s also important that our workforce reflect the diverse customers and neighbors that make up these communities.

As an equal opportunity employer, we are committed to an employment environment free from discrimination. Employment decisions are made by placing the most qualified person in each job without regard to race, color, sex, pregnancy, sexual orientation, gender identity, religion, marital status, age, national origin, disability, genetic information, veteran status, citizen status or other protected group status as defined by federal, state or local laws. In Canada, we comply with the Employment Equity Program laid out by the Canadian Federal Contractors Compliance Criteria.

**Expanding the Presence of Women and Veterans in Our Ranks**

The waste industry traditionally has been male-dominated, and even today, a job in environmental services may not be on a woman’s radar. Another industry challenge is a serious shortage of drivers and technicians. We’re taking steps to address both of these challenges by actively seeking women as a group to recruit, hire and develop. For example, in 2015, we joined the Women in Trucking Association (WIT), which works to support women in the industry. Waste Management is serving on WIT’s advisory committee and working closely with the organization and other trucking industry participants to address recruitment.

The recruitment of veterans is another ongoing focus for Waste Management. In 2015, 14 percent of all our U.S. hires were military veterans — a higher percentage than we have experienced in the history of the company. We are frequently lauded for our veteran outreach, such as being named for six consecutive years as a Top Military Friendly® employer by G.I. Jobs and a “Best for Vets” employer by Military Times.

BETTER UNDERSTANDING WORKFORCE DISABILITY

We also are working to better understand the number of individuals with disabilities within our workforce. One way to do so is through a Department of Labor self-identification by employees every five years. Because responses are voluntary, we have been challenged to obtain a meaningful response rate beyond 10 percent, a common problem among companies. Based on data collected from this small sampling, employees with disabilities would be projected at less than 2 percent of our workforce, a number that we consider unrepresentative. We continuously benchmark against companies with higher response rates to implement best practices around communication and education on the function of the survey and to enhance our own efforts around our recruitment of and accommodations for people with disabilities.

Waste Management has been proactive in working with the Department of Labor on regulatory proposals by participating in various professional and industry groups, including National Industry Liaison Group (NILG). NILG is the largest consortium of private industry federal contractors working directly with the Department of Labor in shaping the equal employment regulations and understanding their impact on the workforce.

DIVERSITY THROUGH OUR RANKS

**Board of Directors**

- **20%** Minorities
- **20%** Women

**Executive Officers**

- **33%** Minorities
- **11%** Women

**Company Officials & Managers**

- **19%** Minorities
- **18%** Women

**Workforce**

- **42%** Minorities
- **17%** Women
Diversity & Inclusion

By U.S. ethnicity

Waste Management

- 0.7% American Indian or Alaskan Native
- 1.5% Asian
- 16.8% African-American
- 58.1% Caucasian
- 21.5% Hispanic
- 0.7% Multiracial
- 0.4% Native Hawaiian or Pacific Islander

All Private Industry Workforce¹

- 0.6% American Indian or Alaskan Native
- 6.0% Asian
- 14.5% African-American
- 63.2% Caucasian
- 13.8% Hispanic
- 1.5% Multiracial
- 0.4% Native Hawaiian or Pacific Islander

By age group, generational breakdown, in U.S. and Canada

- 0.43% Veterans (born 1922–1943)
- 18.4% Baby Boomers (born 1944–1960)
- 58.9% GenXers (born 1961–1980)
- 22.3% Millennials (born 1981–2000)

By age group per GRI Guidelines

- 11.4% Under 30 (after 1986)
- 54.0% 31–50 (1966–1985)
- 34.6% Over 50 (before 1965)

Waste Management Workforce 2015

By Type

- 81% hourly
- 19% salaried

By Region

- Canada 2,500
- U.S. 38,000
- India <300

¹Source: EEO1 2014 Filings
We work hard to attract, develop and retain the best talent in the industry. Yet, employee turnover is an ongoing issue, largely because of improvements in the U.S. economy. As the economy continues to rebound, the highly skilled and certified professionals that make up our workforce — truck drivers, route managers and maintenance technicians — are in demand. Because engaged, experienced employees are integral to safety and operational excellence, we are aiming to reduce driver and fleet technician new-hire turnover by 50 percent.

Being an employer of choice is critical to this effort, which begins with ensuring that we embody our values of honesty, accountability, safety, professionalism, respect, inclusion, diversity and employee empowerment in every action. For example, communication among company leaders and employees at all levels fosters honesty, accountability and respect. Our senior leaders operate with an open door — and open email — policy. Each quarter, this team hosts a Town Hall-style meeting at our Houston headquarters. We have begun expanding participation throughout our operations through live streaming technology. Employees unable to attend also are invited to submit questions by email, and they receive direct responses. Responses to common questions are often included in our company’s weekly internal newsletter. In addition, a replay of the meeting is posted on the company’s intranet.

We emphasize engagement as a way to empower employees. Our Waste Management Drivers Council, for example, captures the wisdom of our front-line employees, who are represented by 17 drivers, one from each market area in the organization. In addition to providing us with feedback on removing barriers that prevent drivers from delivering exceptional customer service, we also have engaged the Council for ideas to help reduce voluntary turnover and promote the retention of drivers and technicians.

We are committed to fair treatment of all employees, so we strive to apply company policies consistently throughout the organization. For our union employees, this goal must be handled within the practices and expectations agreed to within the collective bargaining unit. For non-union employees, we also look for ways to reinforce our fair treatment and continuous-learning culture. Some of the ways we do so are through our Driver and Route Manager Councils; the engagement between employees and managers as part of our Service Delivery Optimization (SDO) program; our Peer Review safety program; and the fair treatment and respect that comes from the adherence to our Code of Conduct.
Learning & Development

The opportunity for every employee to reach their full potential is perhaps the most important way that we can maximize workforce engagement and retention. This is why we provide expansive learning and development solutions to meet the needs of our business and our people, as well as providing coaching, feedback and annual performance reviews on a consistent basis. We believe environmental excellence and compliance are the hallmarks of sustainability and reflect Waste Management’s core values. As such, compliance with applicable regulatory standards and internal policies and procedures is part of the performance review structure for employees. To foster a culture of collaboration, we use daily huddles and regular check-ins to solicit feedback and share information.

Our goal is to provide continual learning opportunities in areas like professional development, sales, leadership, technical training and compliance training. We take a “learner-centric” approach to provide employees with a mix of options. All employees participate in annual training that includes job-specific programs as well as a variety of general professional development trainings. We offer training programs delivered face-to-face, as well as virtually through mobile and online communications. The latter is facilitated through technology that delivers “just-in-time” learning, streamlines the learner’s experience, creates online communities to build collaboration, and provides individualized development plans. The company partners with colleges and credit-granting organizations to provide employees, and, in some cases, their families, with tuition discounts, scholarships, grants, waived fees and customized programs. Our focus is to create a continuous learning culture that drives performance and improves talent.

Senior Management Leadership Program

As part of our succession planning process and continued commitment to developing talent, we created a leadership program in 2015 to build bench strength at the senior management level. The program includes a series of business-related modules that incorporate classroom instruction, practical projects, leadership assessments with executive coaching, and exposure to the senior leadership team in both formal and informal settings. Components of this program will be integrated with leadership programs that support development and retention of our mid-level leaders.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Employee Turnover Rates</th>
<th>Voluntary Employee Turnover Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>21.87%</td>
<td>13.06%</td>
</tr>
<tr>
<td>2014</td>
<td>24.52%</td>
<td>14.11%</td>
</tr>
<tr>
<td>2015</td>
<td>23.26%</td>
<td>14.34%</td>
</tr>
</tbody>
</table>
Each major Waste Management department conducts job-specific training and development. Some of the most critical positions in the company are fleet technician, driver and customer service professional. Safety is our first priority, so in 2015 we recertified our operations leaders and managers on our company’s safety rules, focusing on different areas depending on role:

- Drivers focused on optimizing service and operational excellence, with an emphasis on people, process, tools and metrics.
- Fleet technicians and managers continued to optimize service delivery by focusing on preventive maintenance standards to safely maintain and increase the effectiveness of our fleet.
- Customer service and sales professionals expanded their knowledge of our services in order to efficiently and helpfully serve our customers.

A more complete overview of the many classes and online training opportunities extended to our employees can be found on pages 116 & 124.

Our Waste Management Training Center was developed to standardize driver training and help us work toward a goal of reducing driver and fleet technician new hire turnover and reducing the number of vehicle accidents. The center includes classroom work, interactive computer lab learning, hands-on learning stations, actual and simulated driving, and immediate coaching from our skilled driver trainers. Since 2012, more than 4,000 drivers have trained at the center in intense, two-week sessions. We believe that the Training Center is an element in our continuous improvement in safety metrics, such as Total Recordable Injury Rate and Vehicle Accident Recordable Rate.
At WM, safety is a core value, consistently influencing behavior throughout the organization. This is for good reason: The U.S. federal government ranks trash and recycling collection among the top 10 most dangerous jobs in the United States, with drivers and collectors facing risks from motor vehicle crashes and unique workplace hazards.

Disposal facility workers must be constantly vigilant when working with sophisticated equipment because it can cause serious harm if operated improperly. Despite a 40 percent reduction in industry fatality and injury rates between 2001 and 2009, and fatality rates decreasing 57 percent from 2014 to 2015, the highest level of safety vigilance must be maintained at all times.

**Our Safety Philosophy**

For more than a decade, we’ve lived by our formalized safety philosophy, Mission to Zero™ (M2Z). The core of the M2Z philosophy is zero tolerance for unsafe behaviors by all employees, with a goal of eradicating all accidents and injuries through coaching and building knowledge. Our safety program includes thorough training, standardized rulebooks and a suite of industry-leading programs, such as installation of video event recorders in more than 95 percent of our collection and support vehicles across the United States.
In an effort to communicate the shared responsibility to safety by leadership and employees alike, we developed a safety vision statement that has guided our program:

**Safety Vision Statement**

World-class safety is achieved when committed employees embrace safety as a core value and act consistently to influence behavior. Safety should not be considered only a “priority,” but instead a core value with no compromise. It requires:

**Leadership to:**
- Clearly communicate and model safe behavior
- Genuinely care and demonstrate concern for their employees
- Accept nothing less than a safe operation

**Employees to:**
- Accept responsibility for their safe behavior
- Actively care about the safety of others
- Participate in all aspects of the Waste Management safety programs

This philosophy of shared responsibility is also aligned with an expansion of our peer review process to work within the disciplinary policies necessary to assure compliance with our safety policies. We continually seek to improve employee adherence to the policies and understanding of their importance. These safety policies are the result of data analysis and consultation with industry experts, and it is important that all employees follow these rules.

Under the peer review process, employees facing disciplinary action for violating safety rules can have the matter heard before a panel of peers. Local employees develop details of the procedure by electing their local panel and determining an approach to presenting facts. After being briefed on the facts, the panel determines whether or not the safety policy was violated.

More than 100 hearings have been requested since 2011, and the number of cases filed has declined over time. We believe the peer review process has elevated employee recognition of the importance of implementing safety rules consistently. Furthermore, it has improved consistency in following company rules with due appreciation for the specifics of an employee’s situation. The process has also increased employee engagement with our safety program and strengthened communication with and among supervisors. Finally, the peer review process has identified opportunities to improve our training programs. We hope the peer review program will further reinforce our safety culture as something employees and managers achieve on a daily basis.
Safety Performance

In compliance with the Occupational Safety and Health Act of 1970, we record work-related injuries and illnesses and report them to the Occupational Safety and Health Administration (OSHA). This federal agency uses the information to calculate organization- and industry-specific injury and illness incident rates (per 100 employees), including the Total Recordable Incident Rate (TRIR) and the Days Away, Restricted or Transferred (DART) case rate.

We are proud to report that we have seen a substantial decrease in our injury rates, which are consistently better than the overall industry average. As a result, we are recognized among the best in our industry for our comprehensive approach to safety.

<table>
<thead>
<tr>
<th>Total Recordable Injury Rate (TRIR)</th>
<th>Vehicle Accident Recordable Rate (VARR)</th>
<th>Days Away Restricted or Transferred (DART)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Management</td>
<td>Industry Average</td>
<td>Waste Management</td>
</tr>
<tr>
<td>6.4</td>
<td>14,449</td>
<td>4.1</td>
</tr>
<tr>
<td>4.7</td>
<td>11,788</td>
<td>4.1</td>
</tr>
<tr>
<td>3.2</td>
<td>14,080</td>
<td>2.4</td>
</tr>
<tr>
<td>3.0</td>
<td>13,788</td>
<td>2.4</td>
</tr>
<tr>
<td>3.2</td>
<td>8,974</td>
<td>2.3</td>
</tr>
</tbody>
</table>

TRIR decreased 87 percent between 2000, when M2Z was launched, and 2015. For 2014, our TRIR of 3.2 was 37 percent better than the 2014 industry average of 5.1, the most recent government statistic available.

VARR improved 66 percent from 2005, when we established this indicator and initiated new and enhanced driver training programs, to 2015. Note that two incident types were reclassified from “property damage” to “vehicle accident” in 2014, making the VARR standard stricter.

DART decreased 65 percent between 2005 and 2015. Our 2014 DART of 2.4 is 29 percent better than the 2014 industry average of 3.4, the most recent government statistic available.

Safety Communications Tools

Safety performance, broken down by area, service function and even equipment use, is shared monthly with employees, with recognition given to accident- and injury-free sites. We also track monthly trends to identify best practices and areas requiring management focus; we share monthly safety advisories with employees. Accident trends are monitored by type (e.g., slips, falls, sprains, etc.) and the impact on productivity. At disposal operations, significant accidents, such as vehicle rollover, are subject to root cause briefings, with company standard rules updated when necessary to eliminate recurrence.

In addition, we also utilize communication tools such as:

> A monthly Driving Science video series for our hauling teams, post-collection employees, maintenance teams and energy services division. These video messages review risks specific to individual roles that must be managed as a part of each workday.
> A toll-free safety Help Line available to our contractors to supplement their initial safety training.
> WM Monday, our company newsletter, features articles on best safety practices and accidents by employees of other companies in the environmental service sector to raise awareness of risks in our own operations.
> CEO Update, a regular communication from our chief executive to all employees, frequently emphasizing safety messages.
Excellence in safety performance is recognized by our CEO at a celebratory Town Hall to recognize Driver and Operators of the Year, and is telecast via web for all employees. A company safety recognition program is standard, providing each operation and area the means to recognize excellence. Employees are also recognized each week in WM Monday. We encourage active engagement between employees and leadership, with our Driver and Route Manager Councils providing a chance for employees to identify risks and best practices together with senior leadership. We find that the councils solve problems and create a new spirit of teamwork.

We work actively with our industry trade association, the National Waste & Recycling Association (NWRA), in its efforts to improve industry safety through training and compliance with regulations, industry standards and company rules and policies, as well as through improvements in roadway regulations. For example, Waste Management and the NWRA have helped pass Slow Down to Get Around laws, which require drivers to change lanes or slow down when passing vehicles like ours. In addition, NWRA is a Standards Developing Organization through the American National Standards Institute (ANSI), and Waste Management is proud to be a member of NWRA’s accredited standards committee.

**Vehicle Safety and Driver Training**

With roughly 17,000 Waste Management trucks on the road each day, vehicle safety is a strong focus. Each year we invest approximately $500 million in the maintenance of collection vehicles and $100 million in maintenance and repairs for heavy equipment. We inspect each vehicle twice daily to support proper operation and tie preventive maintenance inspections to vehicle usage rates. These investments in fleet safety, driver training and onboard equipment have helped us decrease reported vehicle accidents by 57 percent from 2007 through 2015.

We provide on-the-job training and evaluation programs for our drivers who meet and/or exceed U.S. Department of Transportation (DOT) requirements. Newly hired drivers undergo more than 80 hours of training, in both the classroom and on the road, with an experienced driver. As part of the training process, evaluations are given at 30, 60 and 75 days. We conduct driver briefings each morning before drivers begin their routes. We monitor to assure compliance with federal regulations for the maximum number of hours spent behind the wheel and require all drivers to pass a general physical and meet DOT physical requirements.
Our Driver Training Center, located in Fort Myers, Florida supports our drivers around the country. The Center provides hands-on as well as computer lab courses and classroom training on critical safety rules and operating practices, with interactive stations devoted to procedures such as safe lifting, Hazardous Energy Control Program (Lock-Out/Tag-Out) and vehicle inspections, among others. Drivers undergoing this intensive training program serve as mentors in their areas, spreading what they learn across the country.

Number of Drivers Completing Intensive Two-Week Training, by Line of Business

<table>
<thead>
<tr>
<th>Line of Business</th>
<th>Number of Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>244</td>
</tr>
<tr>
<td>Commercial</td>
<td>80</td>
</tr>
<tr>
<td>Roll-Off</td>
<td>574</td>
</tr>
</tbody>
</table>

Looking to the future, we will soon be certifying drivers in the SAFETY system, an advanced training program that teaches the critical skills of safe driving. The principles learned through SAFETY will be revisited monthly and demonstrated to drivers through an ongoing video series.

Safety Technology

Our great strides in safety performances reflect an ongoing strategy to leverage technology in our safety processes. In recent years, Service Delivery Optimization (SDO) has significantly improved our collection and maintenance operations by optimizing our systems through technology that includes onboard computers, routing software and cameras.

A critical element of SDO is DriveCam®, a small video recorder mounted on the windshield of our collection vehicles. The recorder is triggered by certain vehicle behaviors, such as aggressive braking, swerving or a collision. Once an event is captured, the device sends the event to DriveCam personnel, who analyze the occurrence and then send information back to Waste Management field managers for performance coaching.

DriveCam also provides our field managers with data related to our goals for reducing risky driving behaviors like following too closely, committing traffic violations and allowing distractions. These insights allow us to proactively coach our drivers and reduce the frequency and severity of collisions. Risk evaluation is ongoing, with tracking by the kind of incident and its severity. Historically, personal observations and incident records were the primary tools available to our managers to identify opportunities for improvement with our drivers, so DriveCam allows us to pre-emptively address problematic behaviors before they become ingrained habits.

DriveCam also allows us to appreciate the ways our drivers avoid collisions with defensive driving techniques. We use these events to document and disseminate best practices among our drivers, featuring the best examples of defensive driving in our “DriveCam Play of the Month.”

In addition to reducing the number of collisions, DriveCam is contributing to reductions in claims as well as fuel and maintenance costs. In fact, DriveCam has been so successful that we’re now offering it to our employees to use in their personal vehicles. Through the DriveCam for Families Program, employees in the United States and Canada can receive a DriveCam for personal use at a 30 percent discount. Although it works the same as Waste Management’s program, the home version video can be accessed only by the family.

A Call for Safety On Site and Beyond

Whether it’s a closed landfill, a renewable energy plant or a recycling drop-off facility, Waste Management has a number of locations across North America that may sometimes be staffed by a single person. While this makes for an efficient operation, it also comes with a risk: What if a lone worker needs emergency assistance while on the job?
Through Waste Management Security Services, Inc.’s (WMSSI) Call for Safety program, operators now have a tool that can offer protection. The Loner Safe Monitoring Device is about the size of a cell phone and attaches to a belt. Its motion sensors detect if an employee has been motionless for a period of time, which triggers an alert. Unless the alert is deactivated, a signal is sent to our Security Operations Center in Houston, Texas, which attempts to contact the employee or emergency responders. The device also features a silent panic button and GPS tracking in case a worker falls or an impact occurs. This program and device have been so effective that we extended its value to our customers as a service offering.

For more than a decade, WMSSI has provided overall protection of our more than 2,000 facilities and $25 billion-plus in assets. Today, WMSSI not only serves Waste Management, but also monitors alarms and provides innovative programs that can enhance business operations by minimizing risk of loss. Our security services team uses intelligent video monitoring and a state-of-the-art Master Control Center to alert both internal and external clients instantly when a covered situation arises. Services provided by WMSSI include video monitoring, mobile surveillance systems, fire and intrusion alarm monitoring, access control, intelligent operations (software application), systems administration, fleet GPS tracking, lone worker safety, executive home protection and security systems integration.
6.0 Community

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- Community Vitality 85
- Charitable Contributions 88
- Stakeholder Engagement 90
Though our operations span 21 million customers in the U.S. and Canada, we are very much a local business that is an integral part of the communities we serve. We want to help make our communities, cities, towns and counties better places to work and live — today and for the future. To do so, we support events, programs and organizations that are as varied as the thousands of communities and individuals we serve.

We concentrate on initiatives that enhance our environment, promote education and improve the livability of our communities, all of which tie to our 2020 sustainability targets to increase recycling, produce renewable energy, reduce fleet emissions and preserve wildlife habitat.

We have long been involved in environmental projects that preserve and protect healthy ecosystems, and we optimize our work with national organizations such as Keep America Beautiful (KAB) and the Wildlife Habitat Council (WHC). Their respective national programs allow us to have local impact at hundreds of sites across our operating areas. Our employees also work in partnership with community-based groups, as well as conservationists, universities and environmental organizations, to support healthy ecosystems.
Mission
Preserving the environment and increasing the environmental services we provide through the cultivation of goodwill, education, open communication and the development of strategic relationships with the communities where we operate, serve or want to serve.

Vision
To be a trusted and valued community partner.

Community Outreach Focus Areas

Environment

- 25K acres protected for wildlife habitat
- 110 wildlife habitat programs

- 78 “Wildlife at Work” programs
- 2 Corporate Lands for Learning programs
- 15 combined “Wildlife at Work”/Corporate Lands for Learning programs

Community Vitality

- $12 million program total charitable contributions (cash and in-kind donations)
- 200K people, including K-12 youth and college students, participating in environmental stewardship and community betterment activities
- >4,000 Waste Management-hosted and/or participated community events
Waste Management owns a wide range of properties — large and small, urban and rural. At our larger properties, in the substantial areas that we set aside as buffer zones, we make a concerted effort to enhance the natural value of the land by providing habitat for wildlife and offering educational opportunities and natural beauty to the surrounding community.

One of our key partners in protecting and enhancing wildlife habitat is the Wildlife Habitat Council (WHC), a nonprofit organization recognized as the authoritative conservation program for businesses. Our long-standing partnership with WHC has resulted in the creation of 110 WHC-certified projects at 95 Waste Management sites. Through project certification, the WHC recognizes commendable wildlife habitat management and community environmental education programs. Together, these properties encompass nearly 25,000 acres created, enhanced or protected for wildlife across North America. The projects often feature a community environmental education component.

Our projects are included in the WHC’s Conservation Registry, an interactive database that maps conservation, restoration and wildlife habitat-enhancement projects worldwide, allowing us to better understand the impact of our conservation programs. We continue to expand certified sites to include small urban habitats at transfer stations, recycling facilities and other smaller Waste Management facilities. Beyond the wildlife habitats certified at our active and closed facilities, we lease our unused property for productive use by farmers and ranchers. As of 2015, more than 16,000 acres in the United States and Canada were used for this purpose.

In addition to our work with WHC in certifying wildlife habitat and environmental education at our sites, Waste Management works with WHC on collaborative efforts among nonprofits, government agencies and companies to create conservation strategies. For example, the Corporate Pollinator Ecosystem Project (C-PEP) brings together companies with the United States Business Council for Sustainable Development to identify pollinator habitats on corporate land and ultimately help revive declining pollinator populations. Upon project culmination, the C-PEP Survey will be presented to the federal government as a response to President Obama’s 2014 goal to restore or enhance 7 million acres of land for pollinators. This effort is just one of our more than 50 programs dedicated to protecting pollinators throughout North America. We also support the Highways Bettering the Economy and
Environment Pollinator Protection Act (Highways BEE Act). If passed, the law would facilitate efforts by states to use more pollinator-friendly highway landscaping practices, including reducing mowing and planting native plants and grasses that provide habitats and forage for Monarch butterflies and bees.

Another dimension of our commitment to environmental preservation is demonstrating the value of biodiversity to children to instill the importance of being good environmental stewards. We incorporate STEM (science, technology, engineering and math) education into most of our wildlife habitat programs. For example, the bat conservation project at the El Sobrante Landfill and Wildlife Preserve in Southern California asks students to use engineering and math skills to solve environmental issues. This project also helps teachers fulfill federal Common Core education standards by promoting group learning and discussion — meaning that busy teachers are more likely to continue to use the program.

**Fairport, New York**
We were honored to be recognized with the Corporate Lands for Learning of the Year award in 2015 for the wildlife habitat and environmental education work at our High Acres Landfill & Recycling Center. The site works with community members and local universities on a variety of projects, including bird monitoring, invasive plant management and environmental education for local elementary schoolers.

**Lewisburg, Tennessee**
Our Cedar Ridge Landfill property serves some unlikely customers: seven raccoons, 11 squirrels and one red fox, to be exact. We partnered with Walden’s Puddle, a wildlife rehabilitation center, to release the animals on Waste Management-owned land not being used for landfill. This includes healthy forest and clean creeks, which are ideal to support these animals.

**Menomonee Falls, Wisconsin**
Our Corporate Lands for Learning project at the Orchard Ridge Recycling & Disposal Facility engages employees to partner with local conservation organizations to maintain wildlife habitat, plant native species and protect bluebirds and wood ducks.

**Okeechobee, Florida**
This landfill coordinated with a local history museum, a rehabilitation center and the Seminole Native American tribe to release a rehabilitated bald eagle into Waste Management’s 2,000 acres of restored marsh and forested wetland.
Recycling is an essential part of reducing the impact we have on our environment. Forty years ago, the recycling challenge was about getting people and businesses to embrace a new way of discarding waste: bundling newspapers, sorting plastics and glass, and resisting the old habit of throwing all our waste in the garbage. Today, with evolving waste streams, single-stream collection methods and advanced processing systems, recycling has become more complex. Recycling the right materials in the right way really does matter, but it doesn’t always happen: it’s estimated that 16 percent of materials put in recycling bins are not actually recyclable.

As the recycling landscape has evolved in recent years and become more challenging for consumers, we are working to educate people about the benefits not only of recycling, but also recycling properly. Our Recycle Often. Recycle Right.® (http://recycleoftenrecycleright.com/) campaign helps consumers understand what can and cannot be recycled.

A key tool of the Recycle Often. Recycle Right.® campaign is a toolkit (http://recycleoftenrecycleright.com/resources/), which includes brochures, posters, ads, radio clips, blog posts, videos and more, used to spread the message. In addition, the toolkit provides K-12 curriculum supporting national science standards and is available to visitors to the campaign’s microsite. We keep the campaign fresh with fun, educational recycling videos for events such as Earth Day and holidays.

Our Recycle Often. Recycle Right.® campaign is national in scope and joins partners for recycling education such as The Recycling Partnership, AMERIPEN, the National Waste & Recycling Association and others. We work hard to make these education programs come alive locally. Many of our sites across North America host educational activities, programs, community events and facility open houses to inform and educate people about managing waste better. For example, our Monarch Hill Renewable Energy Park in Coconut Creek, Florida, hosted an event with the Miami Dolphins for more than 800 elementary school students and their families to learn about sustainability, renewable energy and, of course, how to Recycle Often. Recycle Right.®
Waste Management’s Recycle Corps: Uncovering Passion, Creating Impact

We work with young people through the Waste Management Recycle Corps internship program in Washington state. Each year, 10 college students participate in an 11-week immersive experience to engage the public and businesses in waste reduction and recycling behavior change. The program has been a valuable opportunity for students. Nearly half of the 36 who have graduated from the program have gone on to work in the industry. They’ve impacted the community with education and outreach through more than 48,000 conversations with customers. This program has resulted in recycling increases of 3,532 tons and savings for our customers in disposal costs.

From a Recycle Often. Recycle Right.® coloring contest, to an America Recycles Day cleanup, to a day camp for children and an Earth Day hike and luncheon for seniors, our El Sobrante Landfill in Corona, California, is deeply committed to recycling and environmental education.

Watch our Earth Day event in Coconut Creek, Florida
https://www.youtube.com/watch?v=L6D6195F_Xk

Through speaking with so many diverse people, networking with a broad range of recycling professionals and extensive training, I learned how impactful the waste system is on our community. Providing just a small amount of education on recycling makes a big difference. It was here that I found a new passion!

Holly
Recycle Corps 2014

Waste Management’s Recycle Corps is a valuable resource for our community. Through their engagement with the public, more residents are now aware of the recycling opportunities provided by Waste Management.

Frank
City of Tukwila, Washington

We worked with Recycle Corps at an apartment complex to increase recycling among residents. After Recycle Corps’ door-to-door campaign, we documented an increase in recycling and a savings of almost $20,000 annually through decreased garbage costs.

Jenna
King County Housing Authority
One City, Many Lessons

Where possible, we provide a multiprogram approach to reach different parts of the community with recycling education. Oakland, California, is a good example of our work with a number of community partners.

Davis Street iRecycle@school Education Center
Davis Street iRecycle@school Education Center is a collaborative partnership of Waste Management Alameda County and StopWaste, a public agency working to reduce the local waste stream. Each year nearly 20,000 Alameda county children learn about what happens to their recycling, garbage and compost at a working materials recovery facility.

Oakland Unified School District’s Green Gloves Program
Our partnership with Oakland Unified School District 98’s Green Gloves program provides annual training to custodial and nutrition staff on recycling and composting, respectively. We also donate compost to the school gardens to introduce the closed-loop benefit of composting food scraps.

East Bay Rental Housing Association
With the recent addition of compost collection to Oakland’s condos and apartments, we partner with the East Bay Rental Housing Association to educate residents through door-to-door outreach, distribution of countertop compost collection pails, signage and more.

Oakland Housing Authority
Oakland Housing Authority and Waste Management work with property managers to ensure that residents have access to trash collection, recycling and composting; we also provide educational materials to support proper recycling practices.
Through our partnership with Keep America Beautiful (KAB) and several other environmental organizations, Waste Management supports thousands of community environmental education and beautification initiatives that highlight our desire to help create and maintain vibrant communities.

For many years we have supported KAB’s annual Great American Cleanup, the country’s largest community improvement program, which engages more than 4 million volunteers in more than 20,000 communities. In 2015, we provided 39 grants totaling $300,000 to various nonprofit environmental organizations and KAB affiliates with programs focused on community beautification and recycling education. In particular, we partner with KAB to fund Think Green® Grants, which support projects such as these:

» Creating more opportunities for outdoor recycling for the Ohio University campus in Athens, Ohio.
» Piloting recycling services in apartment complexes in Westmoreland County, Virginia.
» Bringing a central recycling collection site to an area without recycling in McComb, Mississippi.
» Supporting the Southwest Detroit Environmental Vision’s Annual Tire Sweep challenge to remove abandoned tires from streets in Detroit, Michigan.
» Sponsoring a Waste In Place workshop for elementary school teachers in which the teachers learn litter and recycling curriculum in Baton Rouge, Louisiana.
» Creating a disability-accessible wetlands observation deck on a nature trail in Niagara, New York.
» Waste Management also sponsors environmental education and beautification initiatives run by community-based organizations. For example, we support Friends of the Rouge, a group enhancing quality of life in Michigan’s Rouge River watershed. In 2016, we sponsored its annual Rouge Rescue cleanup event as part of its 30th anniversary celebration.

We also lend our expertise in recycling education to special events. Our Southern California area team partnered with the Special Olympics World Summer Games to bring recycling education to its 2015 games. Waste Management provided complimentary trash and recycling to 6,500 athletes and their fans, along with WM Recycling Ambassadors to educate on good recycling practices in what was the biggest sporting event in Los Angeles since the 1984 Olympics.
Keeping Neighbors Safe
When Waste Management drivers are working their routes in the wee hours of the morning, they have a unique opportunity to be the eyes and ears of the neighborhoods they serve. For more than a decade, our Waste Watch® community program has leveraged this advantage by training our drivers to recognize and handle situations that just don’t seem right. The program teaches drivers how to observe and report suspicious activities and emergencies to local public safety and law enforcement agencies. Introduced in Forest Grove, Oregon, Waste Watch has trained thousands of employees to keep an eye out in more than half the U.S. communities we serve.

To become recognized as a Waste Watch Certified Driver, an employee participates in a formal training program, which includes instruction from Waste Management corporate security and local law enforcement personnel, and then passes a written examination.

We also partner with other 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.

Over the years, the Waste Watch program has received widespread 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. Drivers have also helped save lives by calling in emergency medical assistance for individuals in physical distress.

Here are just a few examples of helpful or just plain heroic actions by our Waste Watch Certified Drivers:

- **Andre Edwards** was working in King County, Washington, when he saw an elderly customer fall in her driveway; he provided first aid for her head wound until the ambulance arrived.

- **Seattle, Washington, driver Micah Speir** found a bag of checks totaling $12,000 near a trash bin on his route and returned it to the local elementary school to which it belonged.

- **Everado Gomez** of Ogden, Utah, rescued a motorist from his overturned truck, which had caught on fire, and stayed with the man until paramedics arrived.

- **Lauro Sanchez** of Ogden, Utah, helped a man who collapsed in a neighborhood along his route.

- **Bristol Township, Pennsylvania, driver Steve Kaufmann** extinguished a home fire on his route, saving the house from serious damage.

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- **Driver Len Robinson** of Edmonton, Alberta, paid a visit to a three-year-old cancer patient, who found joy in watching YouTube videos of Waste Management trucks at work. The boy’s day was made after he received a Waste Management toy truck and the opportunity to sit in the real truck.

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- **Brian Martin** and colleagues were on their Mandeville, Louisiana, route when they spotted a car that had crashed into a house. They worked together to ensure the safety of the driver and rescue a boy from inside the house.
Local Economic Impact

Our day-to-day operations — from $3.6 billion in wages and benefits to the $418.9 million in income taxes paid in the U.S. and Canada — boost economic growth in the communities in which we live and work. In 2015, we spent $6.5 billion on supplies, one-third of which involved purchase of collection and operating fleet. Supporting small businesses through the materials and supplies we purchase also contributes to local and national economic growth: in 2015, we spent $87 million with diverse suppliers as part of our commitment to diversity and inclusion.

In many of the municipalities in which we do business, we also provide other economic contributions as part of our commitment to the municipality. Our major business projects paid $132.8 million in host community fees to municipalities in which they are located. Host community benefits are fees charged by the community where the operating unit resides, specific to the facility type in operation. These fees may be a flat amount per month, a percentage of specific revenue or a dollar amount per ton/yard received. Total host community benefits declined significantly from 2013 to 2015 with Waste Management’s divestiture of Wheelabrator Technologies.

### Income Taxes Paid (in millions)

- **U.S.**
  - 2014: $714.0
  - 2015: $372.7
- **Canada**
  - 2014: $44.0
  - 2015: $46.2

### Real Estate Taxes Paid (in millions)

- **U.S.**
  - 2014: $68.4
  - 2015: $57.4
- **Canada**
  - 2014: $5.6
  - 2015: $5.6

The primary factor in the year-over-year reduction in U.S. income taxes is a reduction in taxable income due to debt refinance and a deduction for related extinguishment of debt expense, as reflected in Waste Management’s 2015 financials/income statement.
Waste Management gives back to communities throughout the U.S. and Canada through financial contributions, in-kind giving, participation on an organization’s board or the sharing of our expertise. Whenever possible, we engage with local stakeholders to understand specific community needs.

**Volunteering in Our Communities**

We pride ourselves on having an employee base dedicated to revitalizing our local communities through kind acts of volunteerism. Employees may take eight hours per year of paid time off during work hours for volunteer efforts. In 2015, volunteers reported contributing nearly 800 hours during paid working hours. This total does not reflect the thousands of hours we know our employees volunteer on their own time. As part of our work with Keep America Beautiful and the Wildlife Habitat Council, we encourage our employees to volunteer in their local areas on projects we sponsor throughout the year. Here are a few of the examples of how Waste Management employees supported their communities in 2015:

» Phoenix frontload commercial driver Rick Boersema suggested a food drive competition to see which line of business could collect the most food for a holiday drive benefiting the Valley of the Sun United Way. The maintenance and sales team won, collecting 989 items; in total, Phoenix North employees collected more than 2,000 items to benefit 82,000 households.

» Drivers from Northern Virginia, Gaithersburg, Fredericksburg, Baltimore and Southern Maryland provided pickup and disposal services of all 230,000 wreaths delivered to Arlington National Cemetery for the winter holidays.

» Our Western Canada team made a young cancer survivor’s day when they granted his wish to see a truck in real life. Driver Len Robinson arrived at his door with a Waste Management hat, a toy truck and, best of all, the chance to sit in a disposal truck.
Supporting Communities When Disasters Strike

When disasters strike, Waste Management responds with recovery efforts, particularly when the disaster happens in our areas of operation. Such was the case in 2015 when Texas and Oklahoma saw record rainfall, with nearly 600 flash flood warnings in May alone. In response, we donated $25,000 to the American Red Cross, along with dumpsters to aid in cleanup in both states. In October 2015, relentless rains led to historic levels of flooding across South Carolina, and Waste Management again donated $25,000 to support direct efforts provided by the American Red Cross.

Finally, we work to prepare our employees for disasters as part of our culture of safety. For example, employees in Orange County, California, participated in online training through Business and Family Emergency Recovery Training (BERT), a nonprofit that helps people prepare for natural disasters and other emergencies. The training, offered in both English and Spanish, earned each employee participant Emergency Operations credentials through the American Council for Accredited Certification.
Waste Management actively seeks out dialogue with all stakeholders who have an interest in our business and hold us accountable to our principles.

We engage broadly, and at every level, with industry peers and multistakeholder groups to discuss the issues affecting our business and the ways in which our operations may affect others. Insights from these engagements help shape our strategic plans and business targets and are especially important for guiding our work within our communities.

Our Approach
We take a systematic approach to stakeholder engagement, starting with public accountability. Every two years we identify the key stakeholders with whom we engage — from environmental and community groups to business and manufacturing leaders, from government associations to scientific academies. These stakeholders can be found across multiple sectors and within our communities. All are essential in helping us stay abreast of current trends, perspectives and policy matters that affect our industry, our customers and our communities.

Our engagement takes many forms. When working on facility upgrades and new construction, we map our community footprint and seek to engage groups and individuals in open dialogue through Community Advisory Councils or more informal routine interactions, open house events, public meetings, tours and more. With our larger customers, we host sustainability forums that focus on ways to reduce costs, lessen environmental footprints and increase the reuse of resources.

Participation in policy discussions supplements our dialogue at the local level and ensures that we are working with stakeholders from many perspectives. We give dozens of presentations each year on topics involving recycling, renewable energy and fuel, and civic engagement. Since 2011, we have sponsored the multistakeholder dialogues of the Sustainable Materials Management Coalition. We believe there is enormous value in bringing together diverse viewpoints in a sustained effort to find common ground and mutual understanding of difficult environmental challenges.
In 2014 and 2015, Waste Management representatives served on dozens of boards and governmental advisory committees, including:

- Member of the Board of Keep America Beautiful Outgoing Chair of the Business Network for Environmental Justice
- Member of the Board of the Wildlife Habitat Council
- Member of the Board of the AMERIPEN — American Institute for Packaging and the Environment
- Steering Committee member of The Recycling Partnership
- Founding sponsor of the Sustainable Materials Management Coalition
- Member of the Board of the Environmental Research & Education Foundation
- Corporate Executive Council member of The Sustainability Consortium

For a full listing of our memberships and associations, see page 128 in the Appendix.

**Environmental Justice and Corporate Disclosure**

Our commitment to celebrating diversity of opinion underpins our longstanding active engagement on environmental justice. One of the central principles of the environmental justice movement is that community members speak for themselves. We agree — and for that reason we continue to sponsor scholarships to the National Environmental Justice Conference and Training Program and serve on the association’s board. This annual environmental justice workshop, co-sponsored by major federal agencies and members of the private sector, brings together community groups and officials from various levels of government charged with protecting human health and the environment to talk about the practical means to achieve environmental justice.

In recent decades, low-income communities and communities of color in the United States have raised the concern that, when compared with more affluent communities, they have borne a disproportionate environmental burden. These communities and their advocates have called for fairness in the siting of landfills, waste-processing facilities and other industrial facilities — an element of what is frequently referred to as environmental justice. This is a concern that Waste Management takes very seriously.

For more than 20 years, we have expressed our commitment to environmental justice through direct and sustained collaboration with regulators, community groups, academics, advocates and others in the industry to ensure that communities that host our facilities are treated fairly. But more than that, we want to assure our stakeholders that our facilities are distributed equitably across the country and are not concentrated in communities where race or economic inequality might affect fair access to the local decisionmakers who determine where industrial facilities can be sited. Using the methodology designed by environmental justice experts and recommended by the U.S. EPA, we believe we were the first to map our landfills and waste-to-energy facilities — the sites for which local community groups and national advocacy organizations most frequently raised concern.

Following our initial report, we reached out to environmental justice advocates and other stakeholders for feedback. They told us they were encouraged by our disclosure, but urged us to go further and map the location of all our operations. This research, as published in our 2012 Sustainability Report, found that Waste Management facilities are generally as likely to be located in communities above the state average income level as below — approximately the “half above, half below the average” of a normal, random distribution. Out of 1,423 facilities, 58 percent are located in communities with higher non-Hispanic white representation than the state average, and 48 percent are in communities with higher incomes than the state average. More information can be found in the Appendix on page 126.

We will update our footprint again with each new census or when Waste Management undergoes an acquisition or divestiture sufficient to change our demographic footprint in a meaningful way, whichever comes earlier. In 2015, our demographic footprint was modified by under 5 percent due to divestitures and acquisitions. Although we did not undertake a comprehensive revision of our environmental justice mapping, we did review the demographics of both divestitures and acquisitions and found their pattern would be somewhat higher in income and lower in non-white representation than our current footprint.
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This appendix provides supplemental information to Waste Management, Inc.’s 2015 Sustainability Report, which is available at [www.wm.com/sustainability](http://www.wm.com/sustainability).

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How we govern and manage our own company and footprint raises issues vital to the communities in which we operate, the people we employ and the customers we serve. How we address these issues is also vital to demonstrating the sincerity of our commitment to sustainability. While many companies work hard to protect the environment from their business, at Waste Management, protecting the environment is our business. That’s why our sustainability strategy is fully integrated into our governance and management systems and reflected in a set of ambitious sustainability goals.

Following is a discussion of the governance and environmental management systems that help us both to deliver services with the highest environmental standards and identify emerging opportunities to capture additional value from waste streams. For additional information on our governance strategies, please visit: http://investors.wm.com/phoenix.zhtml?c=119743&p=irol-govhighlights.

**Economic Impact**

**Non-GAAP Measures**
The “Economic Impact” section of our Sustainability Report presents Adjusted Income from Operations, Adjusted Operating Margin, Adjusted Operating EBITDA, Adjusted Operating EBITDA Margin, Adjusted Earnings Per Diluted Share (Adjusted EPS) and as-adjusted 2014 Revenue, each of which exclude certain items affecting comparability of our results and are not defined by generally accepted accounting principles (GAAP). We believe that non-GAAP measures provide useful information to investors by excluding items that the company does not believe reflect its fundamental business performance and/or are not representative or indicative of our results of operations. The company defines Operating EBITDA as income from operations before depreciation and amortization.

The “Economic Impact” section of our Sustainability Report also presents Free Cash Flow, which is a non-GAAP measure. The company discusses Free Cash Flow because we believe that it is indicative of the company’s ability to pay its quarterly dividends, repurchase common stock, fund acquisitions and other investments and, in the absence of refinancings, to repay its debt obligations; however, the use of Free Cash Flow as a liquidity measure has material limitations because it excludes certain expenditures that are required or that the company has committed to, such as declared dividend payments and debt service requirements. The company defines Free Cash Flow as net cash provided by operating activities, less capital expenditures, plus proceeds from divestitures of businesses and other assets (net of cash divested).

Non-GAAP measures should not be considered a substitute for financial measures presented in accordance with GAAP. Operating EBITDA and Free Cash Flow may not be comparable to similarly titled measures reported by other companies. For quantitative reconciliations of non-GAAP measures to the most comparable measure calculated in accordance with GAAP, please see the financial tables accompanying WM’s press release dated February 18, 2016, announcing full year 2015 earnings and comparisons to 2014: http://investors.wm.com/phoenix.zhtml?c=119743&p=irol-recentnewsArticle&ID=2140426.
Governance
Ten members serve on the Waste Management Board of Directors, nine of whom, including the Chairman of our Board, are independent as defined by the New York Stock Exchange. Waste Management’s CEO is the tenth director, and he does not hold the Board chairmanship. Board members are each elected annually. There are three standing committees: The Audit Committee, the Management Development and Compensation Committee and the Nominating and Governance Committee. Our Board of Directors’ biographies and our governance guidelines are posted on our website.

Board of Directors Diversity
The Nominating and Governance Committee seeks Board candidates who bring a variety of perspectives and industry knowledge relevant to Waste Management’s business. Candidates are evaluated for personal and professional integrity and sound judgment, business and professional skills and experience, independence, potential conflicts of interest, diversity and potential for effectiveness in serving the long-term interests of shareholders. While there is no formal policy with regard to weighting diversity in identifying director nominees, the Nominating and Governance Committee considers diversity in business and professional expertise as well as gender and ethnic background when evaluating director nominees. The Committee uses a matrix of functional and industry experiences to develop criteria to select candidates.

Before being nominated, director candidates are interviewed by a minimum of two members of the Nominating and Governance Committee, including the Non-Executive Chairman of the Board. Of the current directors, two are female, one is Hispanic and one is African-American.
Strategy and Management Processes

Environmental excellence and compliance are hallmarks of sustainability and core elements of our management framework. An important tool for integrating sustainability into our business has been our strategic business framework, which includes “scorecard” tracking of key metrics to reinforce alignment with key objectives. (See figure on previous page 95.) Using this performance framework, we align stakeholder perspectives and market opportunities that will guide the entire organization for the year and beyond. Compensation is affected by alignment with company goals (including, as applicable to a business unit, sustainability goals), and compliance and sustainability are part of our performance review structure.

Our senior leadership uses this performance process to ensure that our entire organization (field operations and staff functions) focuses on strategic objectives. The measures also assist with legal and regulatory compliance and support environmental performance, stewardship goals and promotion of our values.

Our Performance Evaluation Process

1. When establishing our strategic objectives, we take into account the perspectives of our customers, shareholders, employees, community members, regulators and other stakeholders, as well as our performance against key internal metrics and our reputation as measured with key audiences. We often employ “heat maps” that identify the geographic scope and intensity of risks and opportunities.

2. and 3. We align our major financial, operational, environmental, community, people, safety, compliance and customer objectives with those specific company-wide programs and initiatives that have been approved and funded as critical to achieving our strategic objectives. Performance expectations are communicated throughout the organization, and senior leadership assigns quarterly and annual targets to which our field operations are held accountable.

An ongoing initiative focuses all employees on knowing our customers better, optimizing assets, innovating in technologies, creating more efficient systems and extracting maximum value from the waste stream. Notably, this initiative closely aligns with our 2020 sustainability goals.

4. We set targets as part of our annual budgeting process. The targets represent commitments we have made to our stakeholders and include improvements and metrics that are factored into employee evaluations. For example, targets have been created on the following topics:

- **Financial**: Traditional financial measures that our investors have found to be important to our success.
- **Customer/Community**: Customer engagement, improving customer interactions and service, and our community relations programs. We seek to improve Waste Management’s reputation by developing and maintaining strong community partnerships and measuring our reputation among key stakeholders.
- **Process**: Efficiency and cost-per-unit measures across our collection, disposal, recycling and waste-to-energy operations.
- **Compliance**: Our primary safety measures and overall environmental scores.
- **Learning and People**: Employee engagement, recruitment, development, retention and training.

5. Our operations at all levels report progress in reaching the targets. At the corporate level, monthly and quarterly reports are prepared and presented to the Board of Directors at each of its meetings. There are Monthly Business Review and Quarterly Business Review meetings to continually engage layers of management on progress toward company goals. This format and target-setting process (using specific key performance indicators) was integrated into our annual performance planning process to ensure consistency among strategy, performance planning, and performance measurement and accountability.
**Sustainability Oversight**

Waste Management's sustainability service offerings are discussed at most Board of Directors’ meetings because these services are linked so closely with company strategy. Topics discussed include recycling goals; market conditions and operations; generation of renewable energy and related acquisitions; and innovations in operations to increase efficiency and provide environmentally superior service. Customers’ sustainability goals (e.g., waste reduction, recycling and materials reuse, expansion of renewable energy capacity) are discussed annually during Waste Management’s Senior Leadership Team’s strategic planning meeting.

The Audit Committee of our Board is responsible for assisting the Board in monitoring the company’s compliance with legal and regulatory requirements. Accordingly, the Audit Committee and the Board regularly receive environmental, health and safety compliance reports from management. Our Compliance Audit Services department supports these efforts and oversees compliance audits at all company-owned, -operated and -controlled facilities and operations.

For more than nine years, Waste Management’s annual strategic planning initiative has included benchmarking of national accounts and municipal customers to determine the scope and nature of our customers’ sustainability goals. Our formal materiality review for this report has been incorporated into this benchmarking. The Senior Leadership Team reviews these data to ensure that new developments in sustainability are an integral part of our business strategies. This strategic planning process helped to identify trends that were a key factor in our decision to acquire new recycling assets in 2011 and 2012, and then to shift our focus in 2014 and 2015 to the efficiency and productivity of our recycling network.

**Risk Management**

At the company level, Waste Management initiated an enterprise risk management (ERM) committee several years ago. The ERM process begins with identification of the company’s programs and processes related to risk management and the individuals responsible for them through use of a risk assessment conducted by Internal Audit. The risk assessment identifies perceived risks to the company, with follow-up interviews with members of senior management to determine any gaps between their and their direct reports’ responses.

Members of the Senior Leadership Team (SLT) and other senior managers are interviewed on strategic risks to Waste Management’s ability to execute against its business strategy, as well as the more long-term risk landscape (up to 10 years). Risk focuses in 2015-2016 are:

» Environmental and regulatory developments;
» Information security and technology;
» Safety;
» People management; and
» Operational risk management

The ERM deliberations and, more broadly, SLT and Board assessment of strategic risks are informed by ongoing risk assessments undertaken by key corporate departments, based on data from field staff, technical and research review, and information gleaned from the company’s network of business and multistakeholder contacts, described on page 127. In the past two years, Waste Management has transitioned from relying on its Risk Management Department to formally assess risk to making risk identification and strategic management a core leadership obligation across corporate and operational units. Key areas of assessment include:

**Technology:** Waste Management’s Corporate Venturing department provides risk mitigation regarding new technologies that would affect the company’s business model. The Senior Leadership Team is updated quarterly formally and on an ad hoc basis in between. The SLT sets priority areas. The Board of Directors is briefed at least once a year, with an emphasis on identification and strategic planning regarding technologies potentially disruptive to the company’s business model.
Waste Management has direct investments in third-party companies that possess promising technologies and business models that could change the competitive landscape in the markets in which we compete. These investments match our current expertise, particularly in current sorting and waste conversion technologies as well as complex logistics and local market analysis, with the developers of new and potentially disruptive technologies.

Additionally, Waste Management is invested in three venture capital funds in North America and Europe that provide us with visibility into emerging "Cleantech" technologies.

Waste Management, through its Corporate Venturing department, reviews approximately 100–150 companies annually, looking for technologies and business models that could improve our cost competitiveness and help us and our customers/communities achieve sustainability goals regarding waste reduction/consulting, upcycling, recycling, waste conversion, fleet emissions reductions and green energy production.

As Waste Management seeks to expand its business and modify its traditional business model to address local, state, or federal policies and requirements, the Corporate Venturing department maintains a large database, derived from global sources, that routinely provides information to key Waste Management line managers about the efficacies of an array of technologies offered by competitors. Subject to non-disclosure agreements, this information can be used by officials and regulators to help shape public policy on the environment by providing real-time data on testing, performance, verification and economics of environmental technologies.

Legislative/regulatory risk and opportunity: Corporate Public Affairs and Area Government Affairs report biweekly and confer monthly on key legislative and regulatory developments affecting Waste Management’s business. In an annual strategic planning meeting, in-depth discussion of priority issues helps identify strategic legislative and regulatory risks and opportunities that we plan to address. A central Public Policy team is charged with managing risk on priority issues affecting the company entity-wide. Public Affairs and Area Government Affairs staff survey risks and opportunities in terms of likelihood, severity and financial impact, and specific risk management goals are set and tracked through the company’s formal performance management system. Key risks addressed in 2014–2015 included the economics of recycling, potential emergence of disruptive technologies or materials management frameworks, federal and state climate change programs benefiting or challenging Waste Management service offerings, and barriers and incentives to Waste Management’s attempts to transition its fleet from diesel fuel. In 2015, the Board of Directors was briefed on benchmarking undertaken on the potential cost of carbon and the prominent pricing models employed by government and prominent companies throughout North America, with the sensitivity of design and rate alternatives assessed.

Operational risk: Continual assessment of potential risk associated with current technologies and structures is provided by engineering and environmental management specialists. For a detailed account of this system, read a discussion of Environmental Management Processes and Systems in the Operations Appendix. Waste Management is a founder and current Research Council member of the Environmental Research and Education Foundation, which focuses on sustainability performance, environmental stewardship and higher process knowledge within the environmental service industry. In 2015, we undertook best-practice, third-party benchmarking and have committed to communicating our resulting programmatic goals and progress to the Board periodically.

Reputation and reporting accuracy: As a service organization, Waste Management relies upon its reputation for reliable service, compliance, safety and sustainable innovation. Managers receive daily clips reporting the reputational footprint of Waste Management and our competitors. These insights are supplemented by field staff focused on gauging reputation and accurate representation of the company in all major markets. Communications on sustainability topics are coordinated centrally with a cross-functional team also charged with sustainability disclosure (including Communications, Public Affairs, National Accounts and Waste Management Sustainability Services), including response to RFPs and supply chain sustainability questionnaires with consistency and accuracy. Trends identified in customer and stakeholder questions and feedback are then inputted into the risk management process.
New acquisitions evaluation for environment, health, safety and social indicators: Waste Management’s acquisitions are almost exclusively in North America, and our risk assessment procedures reflect our ability to rely upon the rigor of national environment, safety and human rights law. Most acquisitions are subsumed into existing Waste Management operations and management and become fully subject to Waste Management standards and policies, including our Code of Conduct and its monitoring. Employees of acquired companies are on-boarded as new Waste Management employees, subject to our mandatory enforcement of immigration laws and company background checks and drug screening. In the less frequent event of a stock acquisition, we look closely at the seller’s employment, labor, safety and working conditions (including working hours, overtime, benefits, compensation), both in terms of meeting Waste Management’s standards and practices and in terms of potential liabilities for past practices. The Legal and Human Resources department are active members of the due diligence team. With regard to safety metrics, Waste Management senior staff are active in engaging with ANSI Z245 standards for our industry. ANSI Z245 standards are voluntary, but many — including those that are the basis for Waste Management policy and procedures — have been adopted into federal OSHA regulations.

Waste Management Recycling: Waste Management has invested in the assets to meet customer demand for recycling and waste reduction, with costs of processing and recovery through commodity sales as part of our economic model. As a result, our exposure to commodity prices has created a risk that can impact revenues by hundreds of millions of dollars. Waste Management Recycling is acting to mitigate the commodity risk through sales practices and contract terms. The recycling export team moves material to customers in China, India, South America, and North America in an effort to diversify the price risk and ensure that markets remain in balance. With prolonged low commodity prices since 2012, we prioritized increased transparency and cost sharing in our contract language to ensure movement of material, utilize market pricing on inbound material, and mitigate our commodity risk. Customers will be more likely to pay processing fees for recycling their material with the remaining split by both parties. These new terms may limit some upside benefits, but the risk mitigation protects Waste Management from the risk of volatile commodity prices. This more transparent pricing policy strengthens our ability to withstand sustained down markets in commodities and retain core recycling capacity.

Municipal Contracts: Waste Management’s Finance department conducts ongoing, in-depth audits on large contracts annually. A separate audit team manages SOX Contract 7 compliance on all new contracts with over $1 million in annual revenue. We have contract compliance teams in franchise markets who proactively audit all contractual requirements, reporting, fee payments, billing, etc. Our Public Sector Services department employs a financial model going through multiple levels of approval up to the Senior Leadership Team. That model includes risk characterization factors such as market conditions, regulatory risks, etc.

Risks and Opportunities Related to Climate Change
We report on the physical and financial risks and opportunities arising from climate change in our annual submission to CDP (formerly the Carbon Disclosure Project). Our CDP disclosure can be found at www.cdp.net and in our Annual Report. The key risks and opportunities are summarized below. Periodically, the Board is briefed on potential regulatory and market responses to climate change that may have near- or longer-term impact on our finances or the value of services we provide.

» Regulatory Risks: Emerging greenhouse gas (GHG) policies at the state and federal levels will likely affect our operations, though the nature of the impacts is uncertain. Regulatory programs to address reductions of GHG emissions will present significant challenges and opportunities for the company since we have operations that emit GHGs but also employ innovative technologies that reduce and prevent GHG emissions.

» Disaster Preparedness: To prepare for the possibility of extreme weather emergencies that have the potential to disrupt our business, we have instituted emergency contingency plans and staged emergency equipment and fuel to ensure continuity of service or a return to service in the shortest time period possible. These plans are based on an assessment of the types of disasters that could affect each business region and the ways in which each type of disaster would impact our employees, business operations and community needs.
Opportunities: Renewable energy and GHG cap-and-trade policies could provide opportunities for Waste Management to develop additional landfill methane offset projects and waste-based energy projects. Similarly, emerging low-carbon fuel standards and other incentives may allow us to realize benefits from our continuing investment in innovative alternative fuel technologies, including converting landfill gas to liquefied natural gas and biodiesel. Finally, our recycling division may indirectly benefit if manufacturers turn to the use of recycled feedstocks in order to reduce their GHG footprint, thereby increasing demand and potentially price for recycled commodities.

Waste Management has participated in CDP’s assessment of corporate emissions and policies since 2004, and we review questions asked by NGOs, rating agencies like DJSI and Vigeo, and customer supply chain sustainability surveys to continually improve our responsiveness. Some of our significant investors discuss with us the ways in which we are evaluating our carbon footprint and the market opportunities for our low-carbon products and services. The majority of institutional investors inquire about negative impacts from various forms of regulation and legislation addressing GHG emissions, and they are looking at potential impacts to earnings.

Two members of our senior management team — the Senior Vice President of Corporate Affairs and Chief Legal Officer and the Vice President of Disposal Operations Support — oversee the work of our Carbon Footprint Team. These management members report on various issues relating to climate change to our Board of Directors at least twice a year. The Board, in turn, provides them with strategic advice for the business.

Code of Conduct

Waste Management’s Code of Conduct is entitled “Focus on Integrity and Inclusion.” Compliance with our Code is central to our business success, and each employee of the company, as well as all officers and directors, is given a copy of the Code of Conduct yearly. It provides standards for ethical behavior across the scope of our business, including providing equal employment opportunities, ensuring employee safety, maintaining quality in our services, honoring relationships with suppliers and vendors, preserving privacy and confidential information, controlling access to electronic information and equipment, and complying with all applicable rules and regulations, including those related to bribery and corruption. See Anti-Bribery Policy posted at https://www.wm.com/about/company-profile/corporate-governance/index.jsp.

Our goal is for all employees to receive training on the Code of Conduct within 60 days of joining the company and periodically thereafter. On average, between 85 and 90 percent of all incumbent employees have completed the Code of Conduct training (initial and refresher courses) within the past 12 months. In addition to the Code of Conduct training, the Integrity Helpline process, sample case scenarios and general investigation outcome statistics are shared with employees periodically, utilizing the company’s internal newsletter as well as any other feasible communication methods. In 2015, there were six different communications specifically to these points. To escalate the focus on the importance of compliance, in 2016, Waste Management Ethics and Compliance has committed to publishing at least one article a month in the internal newsletter, along with accompanying messages from a senior executive to different key employees when appropriate.

The Code applies to all employees, and signed acknowledgments are required attesting that each recipient understands the responsibilities outlined. We expect employees to report violations, and we provide an anonymous and confidential Waste Management Compliance and Ethics Integrity Helpline should a concern arise. Employees are highly encouraged to utilize all internal reporting resources, including the Help Line. The Integrity Helpline reporting, an annual Business Ethics questionnaire and whistleblower processes in accordance with the Code of Conduct are reviewed by an outside auditing firm. Amendments to the Code require the Board of Directors’ approval.
Today, over 99 percent of Waste Management employees reside in North America, and 99 percent of suppliers are based in North America or Europe. In these markets, we are fortunate to operate within strong regulatory requirements regarding minimum wage, competitive corporate compensation packages, and enforced bans on involuntary labor, discrimination, uncompensated overtime, child labor and other key human rights assurances. As we begin to make very modest expansions in our supply chain and employee base beyond our historical reach, we are getting ahead of the potential for human rights concerns by creating new applications of our Code of Conduct to ensure that our fundamental values remain applicable globally.

For example, as we anticipated expanding our service center in India during 2016, we created a specific Code of Conduct for Indian employees. This Code was deployed with the same scope of coverage, monitoring and access to confidential Help Line response that we employ in North America. By the end of 2016, we anticipate all employees will be trained on these policies and procedures. In light of this modest increase in our international footprint, we also reviewed our Code of Conduct to confirm its alignment with the 10 principles of the United Nations Global Compact (UNGC) so that we can direct employees to the UNGC for helpful background and information. Our Corporate Security Group has an important role in assisting with investigation of both North American and international questions involving compliance with our Code of Conduct. The Security Department has a role in supporting compliance with privacy, intellectual property, physical and personnel security as well as the broader Code requirements, which can be downloaded at https://www.wm.com/about/company-profile/ethics/our-values.jsp.


Supply Chain
Through our Procurement department, Waste Management has the opportunity to demonstrate our environmental and social commitments by making purchases with an awareness of our impact on the environment. We also have unique opportunities to work collaboratively with suppliers to help them cut waste, use recycled materials and leverage their expertise to help us reach our sustainability goals.

Our Procurement Policy defines value as “the best combination of quality, cost, delivery, service technology, sustainability and risk in equipment, materials, goods or services.” For third-party waste service providers, we require environmental assessments that review compliance with all applicable environmental, health and safety requirements. (For a discussion of Waste Management’s role in the global supply chain, visit www.thinkgreen.com/ceo.)

The Waste Management Supply Chain team receives training on the Procurement Policy and Procedures when the procedures are updated and new members join the team.

Our suppliers are expressly bound by the Waste Management Code of Conduct for Consultants, Contractors and Suppliers, which is included in all contracts for all significant amounts (visit www.wm.com/about/company-profile/ethics/pdfs/WM_Supplier_Code.pdf). This Code of Conduct has been amended recently with a provision referencing the United Nations Global Compact (UNGC) and our expectations that all suppliers will respect UNGC principles. The provision is included in our master template that is used for both new and renewal contracts.

We conduct periodic business reviews with critical suppliers to ensure contract and Code of Conduct compliance. The Code includes these obligations:

- A ban on discrimination in hiring and employment practices;
- Avoidance of even the appearance of a conflict of interest;
- A ban on any conduct constituting harassment;
- An affirmative duty to treat all with dignity, respect and fairness;
Strict bans on offering or accepting bribes, kickbacks, payoffs or other unusual or improper payments;

A ban on making a political contribution on behalf of Waste Management;

An affirmative obligation to be a good corporate citizen and a trusted and valued community partner and to safeguard the environment and natural resources;

A guideline strictly limiting gifts and entertainment;

An expectation of accurate books and records;

A requirement to comply with all applicable laws and regulations; and

An obligation to report all work-related incidents relevant to the contract immediately.

The Supplier Code of Conduct also lists a domestic and international Waste Management Compliance and Ethics Help Line number. The Code is monitored through the Help Line, which is available to all consultants, contractors and suppliers as a resource in case of questions. All consultants, contractors and suppliers are obligated to report any known or perceived violation of laws, regulations, Waste Management policies or our Code of Conduct. Note that we have amended our Supply Chain Code of Conduct to reference the United Nation's Global Compact's Ten Principles and our expectation that all suppliers will respect our alignment with those principles. This provision is included in our master template for contracts to be used for new and renewal contracts. We reserve the right to audit and inspect supplier operations during the term of the contract and for a limited time after termination.

We work to minimize risks in our supply chain by analyzing our spending on all critical categories of materials, goods and services as part of our strategic sourcing and category management procedures. We manage critical categories within a documented process to ensure there are adequate numbers of suppliers in place for each critical category to guarantee supply. Critical suppliers are defined as those whose absence could jeopardize our business objectives. In 2016, we identified approximately 500 Tier 1 suppliers which, combined, account for 75 percent of our total procurement spend. We estimate that no more than 1 percent of Waste Management's supply chain expenditures involve purchases from companies located outside North America and Europe.

We work with our suppliers to envision a closed-loop supply chain by purchasing recycled products and supplying our vendors with waste materials that can be recycled into new products. The following are some examples:

- We have a policy of purchasing paper with a minimum of 30 percent recycled content.
- Where the market is available, we recycle our equipment by grinding up plastic garbage cans to make new plastic containers, reclaiming steel from scrap containers, repurposing used tires into cutting edges for scrapers and dozers, and having used oil recycled for other purposes.
- We use new products such as enhanced longevity motor oil and new materials to reduce the weight of fleet trucks. We pay attention to the degree to which plastic containers can be recycled into other plastic containers and buy accordingly. All of our suppliers are working to increase the amount of recycled plastic in our products. Learn more about our fleet in the Operations section of this report.
- Our Real Estate department oversees the deployment of recycled and energy-efficient materials in its Capital Projects and Construction Management Program, identifying vendors for controlled lighting and HVAC, occupancy sensors, recycled-content carpet and furniture, and low-emitting paints and adhesives.

The single-largest category in our supply chain spending in any given year is collection equipment and the fuel to run it (over 20 percent of total spending). For nearly a decade, we have focused on equipment efficiency and innovations to reduce the GHGs associated with this aspect of our supply chain. Our truck fleet continues to transition from diesel to natural gas, cutting GHG emissions by 21 percent with each new truck. More than 90 percent of the trucks we purchased in 2015 had natural gas engines. We have also worked for years with truck suppliers to develop ways to lightweight our vehicles, using new types of materials as technology develops and safety specifications allow. Waste Management has also been a leader in the use of hybrid vehicles, piloting them for use in our industry.
Supply Chain Stakeholder Engagement
Waste Management believes that active engagement in business groups and broadly based stakeholder groups is one of the best ways to continually challenge ourselves to do better. Improving the sustainability of our fleet requires collaboration, such as membership in the National Clean Fleets Partnership. This partnership operates more than 1 million commercial vehicles nationwide, and it is committed to finding ways to improve the fuel efficiency of U.S. trucks. We are also members of the U.S. EPA’s SmartWay Transport partnership and of the Energy Security Leadership Council of Securing America’s Future Energy (SAFE), both of which are dedicated to improving heavy-duty vehicle efficiency and reducing emissions throughout the transport supply chain.

Supplier Diversity
At Waste Management, we work to create an environment where everyone has an opportunity to succeed. As part of our commitment, we identify and reach out to underrepresented groups, such as minority-, women- and service-disabled-veteran-owned businesses, to work with us and add value to our supply chain.

Our ongoing supplier diversity program focuses on maintaining a balance between high levels of service, quality and competitive pricing, while assisting businesses that have been historically overlooked in the procurement process. The program ensures that these businesses participate in each bid process where such a supply base exists. In 2015, we purchased nearly $87 million in products and services from diverse suppliers.

All of our Product and Service Agreements contain language that promotes our diversity program. The goal is for our suppliers to have processes in place that encourage 10 percent of the total dollar amount of related purchases of services and materials to be placed with minority, women’s or veteran business enterprises.

Waste Management does not have an internal diversity certification program, but rather recognizes third-party public- and private-sector certifications, such as the National Minority Supplier Development Council (NMSDC) and the Women’s Business Enterprise National Council (WBENC). In 2015, we conducted an audit of all registered minority-owned businesses for the purpose of:

- Tracking and reporting our spend with diversity suppliers accurately;
- Ensuring that registered diversity suppliers have current certifications on file with the NMSDC or the WBENC and their Regional Partner Organizations;
- Bringing high-potential diversity suppliers together with our category managers and area procurement managers; and
- Identifying strong diversity suppliers who can potentially support us by leveraging other companies with well-developed programs that have identified their base of relevant diversity suppliers.

The audit allowed us to ensure our database is up to date, and that all registered minority-owned businesses have the proper certification on file. Additionally, a new process was introduced so that suppliers can update and upload diversity certifications. This process also sends an automated email reminder from our TSMS system prior to expiration of certificates.
Public Policy

Stances on Key Political Issues

The environmental services industry is highly regulated and complex. And it’s in flux. Increasingly, Waste Management and other companies like us are doing much more than managing waste. We are producing energy, restoring habitats and helping local governments and citizens to reduce, reuse and recycle materials. As we work with our customers and the communities we serve to create a more sustainable future, we believe we have an important voice to add to the discussion around several key policy debates, as noted below.

These issues represent significant challenges for our industry and are areas of special focus for Waste Management. We welcome engagement from stakeholders around these issues and strive to work with representatives from government, the business sector, community groups and environmental advocates to build consensus for positive change.

As we have sought to maximize the value of the material we manage, we have reviewed U.S. EPA’s waste hierarchy — reduce, reuse, recycle, recover and then dispose — as well as state-level solid waste and recycling priorities. Our review revealed that current regulations regarding solid waste, recycling, energy policy and renewable fuels often compete with each other and produce unintended results. Newer technologies designed to divert material from landfills also do not fit neatly into U.S. EPA’s hierarchy. As U.S. EPA and state governments address the environmental impacts of waste disposal, recovery and recycling, we encourage them to consider life cycle approaches that view waste not merely as a problem to be solved, but as a resource. Moreover, life cycle thinking highlights the measurable benefits of material management in its opportunities to reduce GHGs and use of energy.

In 2011, Waste Management funded the Sustainable Materials Management Coalition to discuss these issues, and the Coalition issued its report in July 2012. The Coalition — composed of representatives of business and industry, academic institutions, environmental and community organizations, and state and local government organizations — came together to develop consensus recommendations on the path forward for sustainable materials management. In 2013, the Coalition developed a second report urging stakeholders to use life cycle thinking to reduce the environmental footprint of products and services. The 2012 and 2013 reports can be found here:
Renewable Energy
In the absence of federal clean-energy standards, state and provincial governments in the United States and Canada bear the burden of developing renewable energy requirements. This has resulted in widely divergent standards. Waste Management supports the development of a federal energy policy that would facilitate the widespread development of renewable energy sources, including municipal solid waste. Federal energy standards would also allow us to make significant strides in reducing GHG emissions associated with fossil fuel consumption.

Energy Security and Alternative Fuel Production
Achieving energy security relies on lessening our dependence on foreign oil, and domestic production of fuel from renewable sources contributes to this goal. As a partner in energy security discussions, Waste Management supports policies, including existing federal renewable fuel standards, that encourage and facilitate the production of fuel from renewable sources such as municipal solid waste, as well as tax policy that encourages development of alternative fueling infrastructure, and the conversion of diesel vehicles to cleaner-burning natural gas and renewable natural gas from waste. Studies have shown that waste-derived fuels typically have the lowest carbon intensity of all biofuel sources.

Natural Gas and Alternative Fuel Vehicles
Waste Management’s fleet policy calls for a transition to natural gas vehicles, which helps us to achieve our goal of reducing our fleet emissions by 15 percent and improving our fuel efficiency by 15 percent. In 2011, we encouraged federal and state regulatory support for the transition of heavy-duty fleets to natural gas as the preferred fuel for our industry. The natural gas vehicle platform provides an opportunity to use renewable natural gas derived from waste materials, further improving emissions.

Mandatory Recycling Programs and Policies
Governments at all levels are seeking ways to divert waste from landfills through increased recycling and recovery. Some jurisdictions have implemented mandatory recycling programs, and we support such programs when they make economic sense, have the support of customers and communities, and reflect the planning and preparation sufficient to ensure success.

Climate Change
Our CEO has set, and our Board has approved, aggressive sustainability goals with ambitious GHG emissions-reduction benefits. There is no limit to the number of emissions-reduction activities available to a highly diversified company like Waste Management.

Opportunities presented to Waste Management from outside or inside the company that have the best potential to deliver high degrees of emissions reduction at low cost or to deliver emissions reductions combined with a positive return are given priority for implementation. Our goal setting and disclosure of progress on production of renewable energy, recycling and fuel efficiency drive our investment strategy. This approach to addressing the challenges of climate change is integrated into our evaluation of all activities and potential investments — from collection fleet and logistics to administrative functions and operating facilities. For example, Waste Management has engaged collaboratively with U.S. EPA and state regulators, environmental organizations, and other public and private owners to develop technical information and recommendations on enhancing regulatory control of landfill gas emissions. As part of the President’s Methane Reduction Strategy, U.S. EPA will finalize a rule this year which we hope will provide greater operational flexibility and enhance our ability to install earlier landfill gas controls at our facilities. Similarly, we worked with U.S. EPA, the U.S. Department of Transportation, engine and vehicle makers, fleet owners and environmental groups to provide recommendations on the next phase of fuel efficiency and GHG-reduction standards for heavy-duty trucks. We are hopeful that the new rules will provide a regulatory framework for our continued investment in clean-burning natural gas trucks.
As evidenced by our participation in the CDP (formerly the Carbon Disclosure Project) since 2004 and disclosed publicly since 2008, Waste Management is committed to the annual disclosure of our carbon footprint and to reporting in our sustainability reports on the innovations we are pursuing to reduce GHG emissions in our operations and for our customers.

We are actively working with stakeholders from all perspectives to assess how GHG emissions can be accurately inventoried and disclosed, as well as how that information can be used in climate change initiatives that improve environmental quality and are consistent with a healthy economy. We participate not only with the CDP, but also with the Dow Jones Sustainability Index and numerous NGO and customer sustainability evaluation services, and we have made our voluntary reports to these organizations publicly available. We have also commented on federal, regional and state frameworks for addressing climate change. Extensive comments, all of which are a matter of public record, and recommended strategies have been discussed with the following:

» U.S. House of Representatives, Committee on Energy and Commerce
» U.S. House of Representatives, Committee on Science and Technology
» U.S. House of Representatives, Committee on Ways and Means
» U.S. Senate, Energy and Natural Resources Committee
» U.S. Senate, Finance Committee
» U.S. Environmental Protection Agency
» U.S. Department of Transportation Environmental Council of the States
» California Air Resources Board
» Western Climate Initiative
» Regional Greenhouse Gas Initiative
» Climate Registry
» Climate Action Reserve

Political Contributions

We periodically make financial contributions to candidates who we believe recognize the importance of the environmental services we provide and who support a fair, free-market approach as the best way to deliver cost-effective services. We do not expect the candidates to whom we contribute funds to agree with our positions on all issues at all times.

Contributions made to political candidates must be authorized by our Government Affairs department and must comply with all applicable laws, including public disclosure of political contributions and lobbying expenses. Our contributions are reported under federal, state and local campaign finance laws and are available for review by the public. Following each two-year federal election cycle, our Board of Directors receives a detailed accounting of all contributions.

The company recently enhanced its disclosure related to political contributions, posting on its website an annual listing of contributions made to candidates for federal office and political organizations engaged in federal elections, as well as information on the portion of payments made by the company to trade associations and social welfare organizations that were used for political purposes, as identified by the trade association or organization. This information is available as Annex A to our Participation in the Political Process policy and is subject to certain dollar amount thresholds stated therein. The full policy and Annex A can be found on our corporate website at https://www.wm.com/about/company-profile/ethics/pdfs/Code_of_Ethical_Conduct.pdf.

Public Policy Overseas

To ensure compliance with international law, Waste Management has adopted an anti-bribery and corruption policy and established a Foreign Corrupt Practices Act (FCPA) Compliance Committee. All employees involved in foreign business projects must receive FCPA training. In addition, the Waste Management Code of Conduct includes a section on doing business overseas to ensure our compliance with local laws as well as U.S. laws that govern our activities in international markets. Visit https://www.wm.com/about/company-profile/ethics/pdfs/Code_of_Ethical_Conduct.pdf.
Environmental Compliance

Our goal for environmental compliance is simple: zero deviations from regulatory standards and sound environmental practice. The goal of our Environmental Management System is to correct conditions that could lead to a violation before the violation happens. We have not yet achieved our goal of zero violations, but we continue to take every departure from regulations, no matter how small, very seriously.

The figure below charts our year-over-year performance — from 2009 through 2015 — with respect to environmental notices of violation (NOVs)1 received. In 2014, when we saw an increase in NOVs, we redoubled our efforts to emphasize compliance. With Board oversight, we initiated a third-party assessment of opportunities to enhance our compliance program, and we began a series of articles in our internal company newsletter on critical aspects of compliance with all applicable law and Waste Management internal policies.

Number of Violations

1NOVs may be given for anything from a short delay in receipt of a required report to a deviation from any aspect of regulatory standards or permit conditions. Some violations could have the potential to impact the environment, but most do not. Upon investigation, not all NOVs are ultimately found to represent an actionable violation.
Environmental Expenditures

As an environmental service infrastructure provider, our environmental expenditures are necessarily interrelated with our operations. These expenditures include compliance, environmental protection, control and research costs, as well as the capital and operating costs for our waste-handling options — from waste reduction and reuse consultation to recycling, waste-to-energy and disposal facility construction and operation. Our environmental expenditures for the reporting period are shown below.

Environmental Expenditures¹

<table>
<thead>
<tr>
<th>Year</th>
<th>Environmental costs (millions)</th>
<th>Total annual expenses (millions)</th>
<th>Percentage of environmental costs to total expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>$3,999.1</td>
<td>$10,338.6</td>
<td>38.7%</td>
</tr>
<tr>
<td>2011</td>
<td>$4,182.1</td>
<td>$11,256.1</td>
<td>37.2%</td>
</tr>
<tr>
<td>2012</td>
<td>$4,490.1</td>
<td>$11,798.3</td>
<td>38.1%</td>
</tr>
<tr>
<td>2013</td>
<td>$4,644.1</td>
<td>$12,904.3</td>
<td>36.0%</td>
</tr>
<tr>
<td>2014</td>
<td>$4,521.0</td>
<td>$11,697.0</td>
<td>38.7%</td>
</tr>
<tr>
<td>2015</td>
<td>$4,050.0</td>
<td>$10,916.3</td>
<td>37.1%</td>
</tr>
</tbody>
</table>

¹ Includes costs associated with the environmentally responsible management of waste and the creation of renewable fuel. Excludes costs associated with sales, general collection operational and administrative cost; merger costs; and unusual items.
Number and Volume of Significant Spills

Waste Management is committed to reducing the number and volume of leaks and spills that occur as part of our operations. We track all fluids our trucks use and train drivers to report any leaks or spills they observe; we also require all significant spills be reported to the corporate office via the Environmental Incident Notification System. The table below summarizes, for our more than 1,200 operating locations, all spills of a size significant enough that we were required to report them to the National Response Center.

Number of Reportable Spills

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Spills</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>10</td>
</tr>
<tr>
<td>2007</td>
<td>6</td>
</tr>
<tr>
<td>2008</td>
<td>5</td>
</tr>
<tr>
<td>2009</td>
<td>4</td>
</tr>
<tr>
<td>2010</td>
<td>2</td>
</tr>
<tr>
<td>2011</td>
<td>1</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>3</td>
</tr>
<tr>
<td>2015</td>
<td>0</td>
</tr>
</tbody>
</table>

Methodology Used to Calculate Our Carbon Footprint

Waste Management’s carbon footprint comprises the anthropogenic Scope 1 (direct) and Scope 2 (indirect) GHG emissions from facilities and activities under Waste Management’s operational control in the United States, the U.S. Territories and Canada, and Scope 3 (indirect) GHG emissions. Scope 1 emissions include direct emissions for process-based emissions from landflling, power generation, fuel for support services and heating, fleet vehicles and refrigerants. Scope 2 emissions include indirect emissions from purchased electricity. Scope 3 emissions include purchased goods and services, capital goods, fuel- and energy-related activities (not included in Scope 1 or Scope 2), business travel, employee commuting, and downstream leased assets. Our carbon footprint calculation relies on company operating data collected from auditable corporate business, legal and accounting records, which have undergone internal quality-assurance checks. Emission factors and methodologies are from the following sources:

2. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks
3. EPA, eGRID Technical Support document, Chapter 3
4. DOE, 1605(b) Voluntary Reporting of Greenhouse Gases Program, Technical Guidelines
5. DOE Energy Information Agency (EIA), Emissions of Greenhouse Gases in the United States, documentation and Emission Factors
9. Solid Waste Industry for Climate Solutions (SWICS) Protocol by SCS Engineers, version 2.2
10. EPA, Climate Leaders Program, Technical Guidance
We participate in multiple forms of data verification. First, in conformance with applicable state or provincial GHG emissions-reporting programs, an independent third party is hired to review original data and provide a verification certificate. Accordingly, the emissions from the landfill subject to the Alberta Provincial Mandatory GHG reporting program are third-party verified by RWDI Air, Inc. for 2014 and by GHD for 2015; emissions from two landfills (one in Ohio, one in West Virginia) are verified by Ruby Canyon Engineering as part of the Climate Action Reserve GHG credit registry program; and landfill gas-to-energy emissions from the one landfill in California for which we are required to report third-party-verified GHG emissions under the state of California’s mandatory reporting program are verified by Analytical Environmental Services. Massachusetts modified its GHG inventory program to no longer require third-party verification of facility GHG reports effective third quarter of 2015. All of our facilities subject to the federal Mandatory GHG Reporting Rule for 2015, which includes more than 200 landfills and one waste-to-energy plant, are subject to rigorous validation checks by U.S. EPA as part of its compliance assurance and enforcement program for the reporting rule.

We commissioned Lloyd’s Register Quality Assurance Ltd. to assure our GHG Emissions Inventory for the calendar year 2015. This verification was conducted in accordance with ISO 14064–3:2006 Specification with guidance for validation and verification of GHG assertions to provide limited assurance that the Scope 1, Scope 2 and Scope 3 GHG data was prepared in conformance with World Resource Institute/World Business Council for Sustainable Development GHG Protocol: A Corporate Accounting and Reporting Standard and the internal Waste Management Inventory Management Plan, First Edition. As a result, 100 percent of our carbon footprint is verified by a third party.

Our GHG inventory reflects the most accurate means available to calculate GHG emissions within our industry sector. We worked with leaders in government, industry and academia — including staff of the multistate Climate Registry and the U.S. EPA — in developing our inventory processes and protocols.

Because a broadly accepted protocol for estimating the carbon mass balance of landfills does not yet exist, Waste Management, along with other public and private owners/operators of landfills, funded development of the Solid Waste Industry for Climate Solutions (SWICS) protocol by SCS Engineers. The protocol represents a first step in refining existing U.S. EPA models and protocols using peer-reviewed, published research to improve landfill GHG emission estimation. We employed the SWICS protocol in estimating the emissions associated with the landfill operations reported in our company-wide carbon footprint and the voluntary GHG reporting protocols in which we participate. (U.S. EPA’s Science Advisory Board views some sources of biogenic carbon dioxide emissions — including landfill gas and biogenic materials in waste — as carbon neutral, so these are not included in our footprint.)

Beginning with 2013 emissions, we aligned our reporting with that of U.S. EPA, which continues to refine its default assumptions and scope of reporting under its mandatory reporting program. If and when we find that U.S. EPA’s rule omits a facility previously included in our carbon footprint, we will calculate a default representing the proportion of emissions thereby omitted and increase the reported emissions included in our footprint to allow our emissions to be compared year over year. As part of this process of aligning our reporting with that of U.S. EPA, beginning with our 2013 emissions reporting, we are using the modified 100-year global warming potentials (GWPs) promulgated by U.S. EPA in its November 29, 2013, revisions to 40 CFR Part 98 (78 Fed. Reg. 71904). Pertinent to Waste Management’s carbon footprint, U.S. EPA revised the GWP for methane from 21 to 25 and the GWP for nitrous oxide from 310 to 298.

In 2014, Waste Management contracted with EnerNOC, a leader in energy intelligence software, to collect and pay utility invoices, as well as to track usage data as part of an enterprise-wide Utility Bill Management (UBM) Program spearheaded by our supply chain procurement managers. When fully implemented, the UBM system will track compressed natural gas, natural gas, propane, landfill gas, delivered heat and water service, and waste.

Information for the UBM Program is audited prior to bill redirection by Waste Management to ensure correct processing of all future invoices. We review data through EnerNOC’s online dashboard and have the capability to run reports on consumption, cost and MTCo2e on a facility, region, division, country and enterprise-wide basis. With this new approach, our data collection and reporting program is more robust and transparent than ever before.

Our calculation of the potential GHG reductions or “avoided emissions” that our operations enable includes the following:

» Production of renewable waste-based energy that replaces electricity generated from fossil fuels.\(^1\)

» Potential avoided GHG emissions associated with annual production and use of renewable natural gas (RNG).

» Recycling of postconsumer materials (e.g., paper, aluminum and plastics) using U.S. EPA’s WARM Model (https://www.epa.gov/warm).

» Permanent carbon storage in landfills of biogenic materials that do not decompose in an anaerobic, landfill environment. Carbon storage in landfills can significantly offset GHG emissions from landfills as recognized by the United Nations Intergovernmental Panel on Climate Change, U.S. EPA’s U.S. Inventory of GHG Emissions and Sinks, the Oregon Climate Trust and the California Air Resources Board — all of which recognize carbon storage in landfilled material as a “sink” in calculating carbon emissions inventories.\(^2\) We have used the SWICS protocol to calculate the amount of carbon permanently stored in landfills from the annual disposal of organic waste — i.e., carbon that will not decompose in the landfill to produce methane.

**Containing Hazardous Substances and Reducing Emissions**

Waste Management owns six hazardous waste treatment and disposal facilities, five of which are active disposal facilities and one underground injection well, subject to U.S. EPA’s Toxics Release Inventory (TRI), a data repository compiled to inform the public about the presence of chemicals in their communities.\(^3\) In U.S. EPA’s most recent inventory of TRI releases (2014), 3.89 billion pounds of chemicals were reported to have been released in the United States, 3 percent of which came from the hazardous waste management sector.

**Volume of Toxic Chemical Releases by Industry**\(^4\)

- Metal mining: **45%**
- Electrical utilities: **13%**
- Chemicals: **12%**
- Primary metals: **9%**
- All others: **8%**
- Paper: **5%**
- Food/beverage/tobacco: **4%**
- Hazardous waste management: **3%**

\(^1\) Avoided fossil-fuel-generated electricity emissions are calculated using megawatt hours of electricity supplied to the grid multiplied by EPA eGRID emission factors.


\(^3\) The six facilities include five active landfills and one underground injection well. In addition Waste Management owns one inactive hazardous waste landfill.

Even though TRI-reportable releases must be within levels authorized by permit or regulation, the TRI was initiated to provide a supplement to the permitting process that would provide communities with information about chemicals from all of the facilities in their vicinity — those releasing emissions to air and water and those containing toxins within structures on their property. Disclosure of the total releases emitted in each community was intended as an indirect means of encouraging pollution prevention, and it has, in fact, served that purpose.

U.S. EPA continues to reiterate its view that increased quantities of TRI materials in containment can represent “a generally positive environmental trend because these facilities are in the business of managing hazardous waste and do so under strict controls.”¹ For example, in explaining what TRI data mean to a community, U.S. EPA, in its most recent commentary about the TRI inventory, prioritized sites by subtracting emissions to land reported by RCRA Subtitle C regulated units because those units were considered to be physically controlling toxic releases rather than emitting them.² Moreover, releases are reported differently based on whether they involve placement in RCRA Subtitle C landfills versus other kinds of landfills, in recognition of the stringent regulation of Subtitle C landfills.³ Waste Management’s emissions under TRI are reported annually to the U.S. EPA and are posted at https://www3.epa.gov/enviro/facts/multisystem.html.

Continuing delays in obtaining permits for new units at two hazardous waste landfills have had two impacts: (1) a sharp decline in containment in the RCRA Subtitle C units on-site and (2) a corresponding increase in transfers off-site as new arrangements needed to be made to accommodate customer needs.

U.S. EPA reports the actual releases and containment at the seven Waste Management hazardous waste facilities as follows:

**TRI Chemical Releases and Containment at Waste Management Hazardous Waste Facilities (in Pounds)**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>19,047</td>
<td>62,128</td>
<td>19,838</td>
<td>2,246</td>
<td>8,258</td>
<td>15,017</td>
<td>13,300</td>
</tr>
<tr>
<td>Water</td>
<td>30</td>
<td>16</td>
<td>14</td>
<td>16</td>
<td>15,708</td>
<td>40.52</td>
<td>0</td>
</tr>
<tr>
<td>RCRA Subtitle C</td>
<td>34,040,988</td>
<td>24,479,007</td>
<td>26,143,719</td>
<td>24,214,088</td>
<td>21,930,366</td>
<td>19,280,924</td>
<td>23,822,274</td>
</tr>
<tr>
<td>Underground</td>
<td>5,025,712</td>
<td>9,574,712</td>
<td>9,253,272</td>
<td>7,374,493</td>
<td>9,949,743</td>
<td>8,842,344</td>
<td>10,968,603</td>
</tr>
<tr>
<td>Injection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer Off-Site to Treatment/ Containment</td>
<td>71,948</td>
<td>171,240</td>
<td>111,704</td>
<td>124,394</td>
<td>580,720</td>
<td>523,149</td>
<td>296,284</td>
</tr>
</tbody>
</table>

Also integral to Waste Management’s focus on eliminating exposure to hazardous substances is our work with customers, using our experience in safely containing hazardous waste in our permitted facilities to work in-plant, on-site with industrial customers to eliminate, reduce and avoid potential exposures from hazardous waste at their facilities. Our Waste Management Sustainability Services employees work with customers to reduce the generation of hazardous waste at the outset, in the design process.


² See www2.epa.gov/sites/production/files/2013-09/documents/tri_factors_to_consider_2013.pdf. (Deleted from public website, but available in paper docket.)

³ Ibid., p. 18.

⁴ Note that U.S. EPA considers the information reported for 2014 to be current as of November 2015. 2015 data have been calculated from site reporting; when U.S. EPA’s official national tabulations become available, we will correct our numbers in future reports to reflect any adjustments they make in their national characterization.
Representative LEED Facilities
Several of our facilities are certified under the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) standards, a globally recognized green building certification program:

- Sorts and processes more than 20,000 tons of recyclables per month.
- Constructed on a former brownfield site using 47 percent recycled content and 42 percent regionally sourced materials, promoting land reuse.
- Includes a green roof made of 80 percent recycled content, reducing heating and cooling costs, contributing to water quality by controlling stormwater runoff, improving air quality and extending the life of the roof.
- Includes bike racks and preferred parking spaces for low-emissions vehicles.
- Features floor tiles made of 46 percent recycled material and 23 percent rapidly renewable material, carpet made of 50 percent recycled material, paints low in volatile organic compounds (VOCs), lumber certified by the Forest Stewardship Council and countertops made of 70 percent recycled material.
- Reused or recycled more than 95 percent of waste generated during construction of Vehicle Maintenance Facility, White Tank, Arizona (LEED Gold).
- Reduced water use throughout the site by 61 percent.
- Reuses 100 percent of truck-wash water through a biotreatment system.
- Used 100 percent low-VOC paints and sealants in the interior space.
- Earned certification for Green Cleaning from the GREENGUARD Environmental Institute.
- Recycled 98 percent of waste generated during construction.

Vehicle Maintenance Facility, Moreno Valley, California (LEED Gold, 2011)
- Reduced facility water use by 54 percent and water used for landscape irrigation by 59 percent.
- Constructed with 30 percent recycled material.
- Features 70 percent building materials that were extracted, mined, grown and manufactured within a 500-mile radius of the project, reducing energy used for construction and related GHG emissions.
- Saves 44 percent annually in energy costs compared with similar buildings.
- Features energy-efficient design, including evaporative cooling, interior lighting that adjusts to maintain constant levels as exterior conditions change and fluorescent lighting.
- Recycled or reused more than 95 percent of waste generated during construction.

Environmental Management
Environmental stewardship is the core of our business — our promise to customers, our competitive advantage and our obligation to the communities in which we operate. How we manage potential environmental impacts and opportunities is a critical element of being a sustainable enterprise.

In a business as highly regulated as ours, protecting the environment, maintaining compliance and innovating to improve operations requires unwavering focus, expertise, comprehensive systems and internal checks and balances. Our approach has evolved over decades, with a focus on integrating environmental functions into key management systems.

Information on our environmental policies, as well as on our management team, practices and training, is available on our website.

Environmental Management Processes
We have a long track record of both supporting high regulatory standards and striving to go beyond them. Our environmental management approach has led us to undertake the following actions:

- Urge the U.S. EPA in 1991 to revise regulations implementing the Resource Conservation and Recovery Act’s Subtitle D and to establish strong and prescriptive federal standards for managing municipal solid waste (MSW). We supported specific, rigorous, government-sanctioned and publicly reviewed standards to ensure environmental protection at all MSW landfills.
Provide consistent encouragement to the U.S. EPA to consider revisions to the RCRA hazardous waste regulations with respect to the management of hazardous waste pharmaceuticals, including extensive feedback on the proposed “Management Standards for Hazardous Waste Pharmaceuticals Rule” published in the Federal Register September 25, 2015.

Innovate beyond compliance. As part of Waste Management’s internal formal performance review, the results of regulatory inspections, internal audits, external audits, and regulatory compliance issues and their precursors are all tracked, managed and remedied as part of the company’s continuous improvement process. Members of senior management, up to and including the Board of Directors, review performance.

Extend the company’s commitment to environmental performance related to events that are not necessarily regulatory in nature but that nonetheless are public concerns, such as noise, litter and odors. Such events are tracked, managed and remedied in real time. We also employ best management practices and conduct routine training to eliminate the dissemination of dust from our facilities.

Test our internal systems to ensure their thoroughness and accuracy. We periodically conduct gap analyses of our Environmental Management System against the International Organization for Standardization (ISO) 14001 standards to ensure the sufficiency of our systems for landfills, transfer stations, hauling operations, waste-to-energy plants, hazardous waste treatment and disposal facilities and recycling facilities. These systems continue to be evaluated and supplemented as appropriate.

Certify all of our Waste Management Sustainability Services operations, including projects at more than 100 customer-operated locations, to the globally recognized ISO 14001 and ISO 9001 standards.

Test our facilities to assure stakeholders that our operations protect human health and the environment. Our environmental experts hold a number of patents on innovative monitoring and analysis technologies, and we often provide monitoring data to outside parties to evaluate how our systems are performing.

Environmental Management System (EMS)

Our environmental policy, practices and procedures apply to 100 percent of Waste Management-owned and -operated facilities and operations.

1. Environmental Policy

Our Corporate Environmental Policy establishes the vision for our Environmental Management System (EMS). The Policy states, in part:

Waste Management is committed to protecting human health and the environment. This commitment is a keystone of all that we do, reflected in the services we provide to customers, the design and operation of our facilities, the conditions under which employees work, and our interactions with the communities where we live and do business. We will be responsible stewards of the environment and protect the health and well-being of our employees and neighbors. We have policies and standards for specific environmental and related aspects of our operations.

2. Planning

Our EMS focuses on preventing, correcting and ultimately reducing impacts associated with our operational activities. Specifically, we focus on the following:

- Eliminating environmental impacts, including spills or leaks from vehicles, landfill gas impacts on the air or subsurface and releases to surface water or groundwater;
- Eliminating community impacts, including odors, litter, noise, dust, and spills or leaks; and
- Eliminating regulatory impacts, including regulatory inspection-alleged issues, warning letters, violations and enforcement actions.
We also use several databases, systems and processes designed to help facility managers plan, implement, check and respond to their site-specific environmental requirements.

**Legal and Other Requirements**
Our EMS tools continually evaluate and determine what regulations, permit conditions and contract requirements apply to facilities. These tools include the following:

» **CyberReg**: An online source for all state and federal statutes and regulations
» **Regulatory Outreach**: Active involvement by our technical professionals in state and local activities associated with environmental regulation development and policy making

Waste Management’s environmental teams work closely with our Legal and Government Affairs departments, and they utilize the above resources to ensure that all facilities have access to relevant laws and regulations.

**Objectives and Targets**
We use the following indicators to quantify environmental performance:

» Environmental impacts/No impacts to the environment
» Community environmental concerns/No community environmental impacts
» Regulatory violations/No violations

Our Environmental Incident Rate (EIR) measures our performance and tracks progress toward these goals at the facility level. The EIR is used to drive continuous environmental improvement on a year-over-year basis.

3. Implementation

**Roles and Responsibilities**
Our EMS relies on our corporate, geographic area and facility-level personnel with job-specific functions, roles and responsibilities for planning, implementing and evaluating the EMS components. The specific departments and personnel involved include the following:

» **Environmental Protection (EP)**: Develops environmental policies, tools and training, and provides strategic or technical advice, with the goal of 100 percent compliance. Oversees environmental performance and ensures environmental impacts and issues are resolved, including correction and prevention.
» **Corporate Engineering Science**: Manages research and engineering science to develop an understanding of the interrelationships between our disposal processes and the environment.
» **Environmental Engineering (EE)**: Provides expertise in the planning and design of our facilities to ensure that operational activities have limited environmental impact. Performs annual planning and forecasting of life-of-site costs for our landfills, including Financial Accounting Standard 143 retirement obligations; the engineering and accounting controls exercised during this process are extensive and are subject to SOX 404 controls (from section 404 of the Sarbanes-Oxley Act) that are reviewed annually by independent external auditors.
» **Air/Landfill Gas Management (AGM)**: Develops and implements the corporate GHG and carbon emissions tracking and reduction strategies. Sets policies and standards. Is responsible for the planning and development of air quality and landfill gas management tools.
» **Groundwater Protection (GP)**: Provides expertise and direction on groundwater protection programs and ensures that environmental monitoring networks are installed and operating to specifications. Provides laboratory services that ensure accuracy and quality control in the analytical testing of environmental samples.
» **Laboratory Services (LS)**: Provides oversight and guidance to the commercial laboratories that support Waste Management’s monitoring programs in order to manage risk associated with the analytical testing of environmental samples. Provides support to all facilities that collect certain routine environmental data as detailed by the Groundwater Protection Program.
» **Waste Approvals**: Ensures permit compliance and safe and environmentally sound waste acceptance procedures and controls.
» **Government Affairs:** Monitors and engages with key federal, state and local governmental entities to ensure that we are at the forefront of developing trends and regulations.

» **Legal:** Provides guidance, support and advice to our sites and market areas. Monitors compliance trends. Manages the company’s process of analyzing the root cause of any failures.

» **Site Managers and Frontline Employees:** Are responsible for all environmental aspects at the site level, with key environmental tasks assigned to appropriately trained local staff.

**Training**

Waste Management recognizes that in order to achieve environmental performance goals, employees must possess the knowledge and skills to manage and conduct operations in environmentally responsible ways. Our environmental training targets a range of operational and functional levels within the company. All new employees participate in corporate ethics and compliance training, which includes our company’s standards for environmental practices. Corporate and local staff with responsibility for environmental leadership are trained in the company’s environmental practices.

Employees with environmental leadership responsibility are provided training through the following programs:

» **Waste Management University (WMU) — Environmental Protection Learning Series (EPLS) online modules:** Monthly online site management trainings on a different environmental subject each month. Attendance is mandatory and knowledge is tested and tracked.

» **In-person training sessions:** On-site trainings conducted by our field EP and/or operations professionals for facility management and technical staff on environmental and compliance subjects.

In addition, Waste Management has environmental training programs targeting operational and functional levels. Our Environmental Compliance Awareness Program (ECAP) provides mandatory monthly training for front-line employees and managers, covering a different environmental subject each month. Knowledge is tested and tracked at the site level. Monthly topics are aligned between these programs whenever possible.

Local training is also provided periodically via in-house classroom training, on-the-job training and outsourced training. In addition, staff with responsibilities related to specific environmental requirements for our operations sometimes need job-specific training, which is provided to employees and managers at all Waste Management operations.

We also use our WMU capacity to provide training to customers, for example on DOT hazardous waste handling requirements.

**Communications**

Communicating environmental commitment and performance to our customers, communities, regulators and investors strengthens our ability to be an environmental leader in our industry. Internal communications regarding environmental commitment and performance help to create an atmosphere where all employees work toward the common goal of continuous improvement.

We communicate within the company using the following methods:

» **Waste Management’s Environmental Incident Alert Notification System** gives immediate notification of significant environmental or regulatory events — including reportable quantity (RQ) spills, environmental impacts (e.g., stormwater, leachate), alleged violations and enforcement actions — company-wide.

» **Waste Management’s CASES Database and Public Commenter Systems** provide real-time notification of any customer-related environmental issues to site managers for response and resolution.
» **Environmental performance results**, including the following impacts, are tracked monthly and communicated company-wide and to senior leadership via the EP Dashboard:

- Environmental impacts such as spills, leaks, gas migration, groundwater contaminant exceedances, certain releases to ambient air and stormwater discharges in excess of applicable standards
- Regulatory impacts such as alleged violations, inspections and enforcement actions
- Community impacts such as off-site spills/leaks, odors, noise, pests, mud and litter

» **Waste Management Visor**, our intranet system, updates reporting systems to help manage tracking of landfills, tanks, authorized vendors and environmental compliance.

» **Overall compliance performance** is reported to management according to the EP reporting structure, via routine activity reports.

We communicate with our communities, customers, regulators and investors through other methods, including the following:

» Waste Management’s corporate website highlights significant research, environmental awards and unique achievements in environmental management.

» Community comments are centrally managed and tracked through response and, if necessary, correction.

» Our environmental scientists and professionals present achievements and research at national and international environmental conferences.

» Our Corporate Communications department is responsible for communication of environmental issues at the company.

» Our local managers support community outreach programs.

**Documents and Operational Controls**

Waste Management has several internal systems for maintaining documents and records related to the EMS. The location of any particular document or record depends on the specific application, since many of the EMS tools are multiple-purpose programs. The two main internal systems are the following:

» **Waste Management Visor Environmental Protection website**: Visor is the company’s intranet, with links to all formal corporate environmental policies, standards, documentation and resources, including the EMS, training materials, web-based tracking systems and databases. Visor is available to all company employees and is reviewed and revised on a routine basis to ensure that it is up-to-date and includes the most recent documents.

» **Waste Management Environmental Program SharePoint**: The EP SharePoint webpage is used to store and share environment-related documents, guidance, training materials and other electronic resources. All Environmental Program and Technical Managers have access to the EP SharePoint website. The SharePoint is available for interactive program tracking (e.g., site visits, odor tracking), document development, idea development and sharing, and document sharing. The EP SharePoint page is regularly reviewed and updated.
We have a wide range of environmental databases including the following:

- **Cycle**: The compliance assurance task calendar program for identifying and tracking completion of site environmental tasks regarding permits, regulations, site plans, policies, etc.
- **Environmental Reporting System (Incident Alerts)**: The repository for reported agency-identified violations (AIVs), environmental exceedances and public comments.
- **Dakota Auditor and Tracer**: A third-party audit management system used to manage compliance representation letters. Also used to track environmental and safety audit findings and corrective actions.
- **Environmental Enforcement Database (EED)**: The Legal department’s violation tracking database for tracking significant violations through completion and reporting the results to senior management and corporate governance.
- **Storage Tank Database**: Used to manage aboveground and underground storage tanks, including registrations for insurance purposes.
- **Applied Landfill Information Analysis System (ALIAS)**: A relational database used to cross-reference landfill characteristics (e.g., cover, liner, waste type) to monitoring points and results.
- **EQuIS**: Contains our groundwater, surface water and other analytical data provided by contract laboratories. Used for reporting, data integrity and management purposes.
- **Landfill Gas Management System (LGMS)**: Houses operational and performance data relating to landfill gas collection and control systems.
- **PharmE Waste Wizard**: Maintains hazardous waste categorization for over 220,000 pharmaceuticals on the market, updated weekly.

In addition to the above, each facility is responsible for maintaining its own operating record, including documents, inspections and reports required by regulation.

**Emergency Preparedness and Response**

We’re always working to refine and improve the disaster response and preparation plans for our facilities. We maintain an Emergency Situations and Evacuation Plan Policy, which communicates management objectives for addressing emergency situations. Facilities may also be required to maintain specific emergency response plans including the following:

- **Hurricane Preparedness Plans** and annual simulation exercises.
- **Disaster Preparedness and Management Plans** in areas subject to natural disasters (e.g., tornados, fires, earthquakes), for safe handling of disaster-generated debris.
- **Spill Prevention Control and Countermeasures (SPCC) Plans** for facilities that store certain volumes of petroleum products and are required to prevent, contain and control spills.

Our employees are trained and drilled to comply fully with Emergency Situations and Evacuation Plans, Local Preparedness Plans and Spill Plans.

**4. Assessment and Corrective Action**

**Monitoring and Measurement**

We use the following programs as a multipurpose, integrated system to monitor, measure, report and track environmental aspects and impacts through closure/completion:

- **EP Dashboard – Environmental Incident Rate (EIR)**: This online system is used to measure, track and report performance across three areas: the environment, our communities and regulations. Our performance goal is continuous year-over-year improvement in EIR performance (Environment, Community and Regulatory).
  - **Environment**: Environmental incidents that occur at our operations are compiled, including the following:
    - Spills/leaks that hit the ground from vehicles
    - Groundwater impacts that exceed regulatory criteria or that show increasing trends
    - Stormwater impacts above benchmarks or reportable release levels
    - Leachate impacts
    - Air impacts that include surface emission overages or reportable air emissions
    - Landfill gas impacts registered by perimeter gas probes

[APPENDIX OPERATIONS]

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• **Community**: To underscore the company’s commitment to the communities it serves, Waste Management developed and deploys a public comment management system. When a comment is received, the information necessary for a prompt response and remedy is routed to the closest responsible manager. The manager is empowered to take action appropriate to the circumstances and track remedies through to completion.

• **Regulatory**: Regulatory incidents and, more important, their precursors are tracked, managed and recorded for each occurrence as part of the company’s compliance program and continuous improvement process. Lessons learned are shared via the company’s EP Dashboard and program of weekly and monthly reporting. Senior management, including the Board of Directors, is briefed on performance on a regular basis. The position of Chief Compliance Officer exists to elevate the issue of regulatory compliance.

  » **EP Dashboard — EP Toolkit**: The EP Toolkit is used to evaluate environmental performance system metrics for the company’s business operations every month. EP Toolkit metrics help ensure that all cycle tasks, audit findings and environmental incidents are completed in a timely manner, and effective corrective actions and preventive measures are implemented.

  » **EP Dashboard — System Reports**: A System Report is a month-end environmental performance summary that is automatically sent to EP Dashboard users of record.

  » **Dashboard** reporting tool also provides users with the ability to review and report environmental performance results on a real-time or scheduled basis.

**Corrective Action and Preventive Measures**

Local EP Managers are responsible for ensuring resolution and prevention of issues identified through the EP Dashboard, EP Toolkit and other environmental database reports. Facility and EP Managers are responsible for ensuring that all identified incidents are closed out completely and correctly. Measures or actions that are not effective are subject to reopening of the incident.

  » **Environmental Incident Rate** incidents are documented and tracked until all corrective actions and preventive measures are implemented. Performance related to completion of the corrective and preventive measures is tracked via the EP Toolkit.

  » **Public Comment Management Program** is the process for addressing environment-related calls from our customers and communities. Environmental comments received at Customer Service Centers are entered into a program called CASES, while calls received directly by the facility are entered into Public Commenter by the site staff. Any comment requiring corrective action is routed to the local entity for response and resolution. Environment-related comments uploaded into either system are centrally tracked through correction and preventive measure implementation.

  » **The Waste Management Compliance and Ethics Help Line** is our portal to internally identify potential instances of noncompliance with company or regulatory procedures. We communicate to employees that it is available for their use. Every inquiry is logged and tracked to ensure that the issue is resolved, up to and including any required corrective actions. The Legal department and EP work together to assess whether the incident has any national implications and to ensure that the corrective action is spread across the organization — so that a lesson learned in one location is rippled across the organization. The Help Line is a confidential system, designed to protect employees’ identities while ensuring that the reported issue is resolved.

Our facilities are expected to ensure that corrective actions and preventive measures are effective. Environmental issues are not closed out in any of these systems without the concurrence of the EP Manager.
Compliance Audits
Waste Management’s Corporate Compliance Audit Services (CAS) conducts independent environmental, health and safety (EHS) and transportation compliance audits. Each year the department conducts hundreds of audits at facilities owned, operated or controlled by the company. Audit planning and scope are based on risk assessment principles, including the nature of operations and consideration of emerging regulatory and EHS trends. CAS reports to the Vice President and Assistant General Counsel/Regulatory, Chief Compliance Office and Legal department. Audit practices are modeled on the nationally recommended compliance audit practices approved by the American Standards for Testing and Materials and the standards for professional auditors approved by the Board of Environmental Health and Safety Certifications.

CAS evaluates and supports improvement of the company’s EHS performance through the following activities:

> Conducting systematic, documented and objective evaluations to verify compliance with environmental regulatory requirements;
> Assisting the company in evaluating and improving the effectiveness of existing EHS and transportation systems and policies; and
> Assisting the company and its managers in preventing, detecting, correcting and proactively addressing compliance issues.

CAS processes and procedures include the following:

> Assessing risk and selecting facilities to audit;
> Training of staff conducting audits;
> Developing audit protocol documents;
> Planning and conducting audits;
> Identifying noncompliant activities;
> Resolving audit findings;
> Documenting management and retention;
> Reviewing and updating program directives and procedures;
> Auditing quality control and assurance; and
> Communicating of audit results.

Facility staff use designated programs (e.g., Dakota Tracer) to document resolution of all audit findings. CAS reviews all findings before they are closed and conducts verification audits to ensure that the finding resolution was effective. CAS communicates the audit results to relevant local and corporate management and follows up to ensure the timely resolution of issues identified through its compliance audits.

Records
Certain data elements are reported with routine frequency, while others are reported on a nonspecified schedule.

Certain groundwater and surface water test data are collected on a routine basis and tied to sampling events specified in operating permits, licenses and applicable permits (usually quarterly or semiannually). These results are housed centrally through our laboratory management program and are reported as they are generated.
Incidents related to unanticipated releases to the environment (e.g., spills, environmental impacts) are required to be reported within 48 hours to the corporate office, on a real-time basis. Notification of these incidents ensures the appropriate resources are made available to address the particular situation and to minimize potential impact to the environment. Response actions are also monitored for effectiveness and timeliness.

Records relating to analytical results, environmental performance elements and compliance assurance tasks are all maintained online within our IT, Legal and/or Environmental Protection departments. Documents and technical resources are available and maintained on our Visor and SharePoint intranet sites, as are training, guidance and standards resources.

Key environmental metrics are reported and compiled on a weekly basis, monitored and reported to senior management monthly, managed and stored online. Environmental aspects of our business, including notices of violation, are reflected in senior management reporting and through an internal environmental metric system that is provided to senior management and housed in the Environmental Enforcement Database (EED). Landfill gas collection system performance is monitored monthly with metrics designed to detect and correct upsets.

All of our facilities must certify annually their compliance with all applicable permits and regulatory requirements through our centralized Compliance Representation Letter process, which is reviewed by senior management yearly.

5. Management Review

Our management teams participate in a management review process to determine the level of success in achieving environmental goals. In doing so, they complete the following tasks:

» Review environmental policies
» Review Waste Management's EMS
» Review the EP Dashboard environmental performance, issues and incidents on a routine basis
» Evaluate corporate and local environmental goals and objectives
» Amend the EMS as needed, including policies, procedures, goals and objectives

Management review and response to environmental performance measures, incidents and issues are used to drive operational changes and ensure that continuous improvement goals are met. Our Internal Audit department performs compliance evaluations on an ongoing basis.
Diversity and Recruitment
As part of our ongoing effort to attract a diverse and talented workforce, Waste Management has built relationships with many national and community-based organizations to advance fair employment opportunities for people of color, women, veterans and individuals with disabilities. The following are examples of our partners:

» National Urban League, Houston chapter
» NAACP and its local chapters throughout the country
» Human Rights Campaign
» National Society of Professional Engineers and its local chapters
» Goodwill Industries
» Committee for the Employment of People with Disabilities, Dallas chapter
» Texas Diversity Council
» Women in Trucking
» SIRE (therapeutic horseback riding for individuals with disabilities), Houston chapter
» Diversity Best Practices/Working Women
» Disabled American Veterans (DAV)
» Ability Jobs (supporting individuals with disabilities)
» AbilityLinks

In addition, many of Waste Management’s career opportunities are posted on career sites designed to target a diverse range of qualified candidates. These include the following:

» Hispanic-Today
» IMDiversity
» Women For Hire
» The Black Collegian Online
» Women in Business and Industry
» GettingHired
» VetCentral
» Disability.gov
» Military Spouse Employment Partnership
» Women in Trucking

As part of our talent acquisition strategy, we also maintain a presence at recruitment fairs and events sponsored by a variety of military-related organizations, including Recruit Military, Non-Commissioned Officers Association (NCOA) Veteran Job Fairs and Hiring Our Heroes.

Human Rights
Waste Management has operations and relationships in the United States and Canada, as well as a cost center in India (WM Logistics). In January 2014, Waste Management divested its investment in China but will continue to provide some technical services. This entity has an employee handbook in place that covers local compliance policies and practices.

The Waste Management Code of Conduct provides the protections afforded by international human rights frameworks and covers Waste Management employees who are located in North America and India. Employees are required to report any noncompliance with the Foreign Corrupt Practices Act (FCPA) Policy to the Chief FCPA Compliance Officer or to the Waste Management Ethics and Compliance Integrity Help Line at 1-800-265-9381 in North America and 00-800-2659-3810 outside North America.
Waste Management’s Code of Conduct has always been in alignment with the United Nations Global Compact’s guiding principles. To underscore our commitment to Human Rights, the Code was revised in 2016 to emphasize this foundational document. Our Supplier Code of Conduct also contains our commitment to conduct business in alignment with the United Nations (UN) Global Compact’s Ten Principles and notifies suppliers that we expect them to respect these principles as well. All employees are trained in the Waste Management Code of Conduct, and we expect all to comply. More information on our Code of Conduct can be found at https://www.wm.com/about/company-profile/ethics/our-values.jsp. We believe in networking with groups focused on ethics in corporate management to keep abreast of best practices. We are a member of Ethics and Compliance Initiative (ECI), Society of Corporate Compliance and Ethics (SCCE), Greater Houston Business Ethics Roundtable (GHBER), and the Manufacturers Alliance for Productivity and Innovation (MAPI) — Ethics & Compliance Council.

We do not believe any of our operations are at risk of infringing on the right to freedom of association, nor do we believe our workforce is at risk for incidents of child or forced/compulsory labor. Finally, Waste Management complies with all applicable rules governing minimum wage in North America. For the fraction of a percent of our employees living abroad, we comply with all applicable rules and pay locally competitive compensation rates.

**Collective Bargaining**

We recognize and strictly adhere to the principle that our employees have the right to self-organization; to form, join or assist labor organizations; and to bargain collectively through representatives of their own choosing. We also recognize that our employees have a statutory right to refrain from such activities. Our company policies and procedures adhere to all applicable domestic laws concerning freedom of association and collective bargaining, nondiscrimination, forced labor and underage workers in the workplace. Through our various subsidiaries, our company has successfully negotiated and now administers collective bargaining agreements that cover about 10,000 employees — about 20 percent of our workforce — in approximately 220 facilities.

We seek collaborative teamwork throughout the company to get the job done. Internal programs like our Driver and Route Manager Councils, our Service Delivery Optimization coaching protocol, and our Peer Review pilots stress the achievement that is possible when employees and managers communicate freely to develop best practices.

**Employee Benefits**

We offer our employees competitive wages and benefits, including medical, dental and prescription drug coverage; short- and long-term disability; life insurance and accidental death benefits; retirement plans; and a stock purchase plan. The company also offers other important benefits such as legal services (e.g., wills, powers of attorney), flexible spending accounts, adoption assistance, paid vacation and holidays, employee discounts, education savings accounts and scholarship programs.

The Waste Management Health and Welfare Benefits Plan allows employees to choose from among different levels and types of coverage. This allows each employee to put together a mix of benefits that meets his or her needs while receiving significant tax advantages by paying for benefits on a pre-tax basis (as allowed by law). About 96 percent of our employees participate in our health and welfare plans.

Waste Management pays the full cost to provide its employees with short-term disability benefits, long-term disability benefits, basic life insurance for the employee and dependents, and employee and family assistance benefits. The costs for some coverage, such as medical and dental, are shared with employees, with Waste Management picking up a majority of the expense.
We are particularly proud of our wellness programs. We have a team of “Get Well Guides” — a group of nurses and coaches who help employees and their families get access to the help they may need for a variety of life challenges. Employees can dial a toll-free phone number for confidential support and assistance from reliable, compassionate professionals who are trained as nurses, coaches, dieticians, clinicians and financial counselors. Employees and their families also have access to 2nd.MD, a virtual service that provides real-time consultation with doctors specializing in a variety of practices — and in 2016, we extended this access to cover an employee’s parents and his or her spouse’s parents.

Our wellness programs also include on-site flu vaccination clinics and health fairs, where we provide blood pressure tests, blood lipid tests and other screenings that aid in the early detection of health risks. A health coach also meets individually with all participants to review their results and suggest action items to improve their health.

Our Transition to Recovery program helps injured or ill employees return to work sooner in temporary assignments that are consistent with their medically documented capabilities. These assignments help the employees remain productive and speed their medical recovery.

We also provide plans to help employees save for the future. The Waste Management Retirement Savings Plan provides employees with diversified fund options in which to invest for retirement. Employees can choose to make pre-tax and/or after-tax (Roth) contributions, with the company providing a market-competitive match with immediate vesting. Employees receive free investment advice through a call center staffed with licensed advisors, as well as through a suite of online tools. About 61 percent of employees participate in our savings plan.

Another valuable program is our Employee Stock Purchase Plan, which provides employees an opportunity to buy shares of Waste Management common stock at a discount of 15 percent or more. About one-third of eligible employees participate in this plan.

Additional benefits, such as the legal services plan, flexible spending accounts and education savings account, are voluntary, and employees participate only if they choose to do so by making the required contributions.

Benefits for Canadian employees, as well as for certain collectively bargained U.S. employees, may differ in some respects from those described above. For example, in Canada, the broader reach of standard health coverage makes Get Well Guides less useful, and our Return to Work program is not identical to Transition to Recovery.

Training & Development
Following is an overview of training and development programs for our employees who work in two of our most critical areas: landfill disposal and fleet.

Employees who staff our landfill disposal sites may choose from courses such as the following:

» **Landfill Manager Training** builds a foundational understanding of the issues most important in day-to-day landfill operations.

» **Air Permitting and Compliance E-Learning** provides a basis for understanding regulatory requirements related to air emissions and pollutants.

» **Gas Collection and Control System Design and Construction** provides standards for design strategy and design components to produce efficient and cost-effective landfill gas control systems.

» **Introduction to Greenhouse Gas (GHG) Management** teaches participants about GHGs, including what they are, how they originate, how emissions work and what Waste Management is doing to reduce our impact.

» **Basics of Landfill Gas Learning Collection** provides a basic knowledge about landfill gas.

» **Low Voltage Electrical Safety** teaches employees safety procedures for working around electricity, including checking voltage, resetting breakers and more.
» **Air Permitting and Compliance** provides a foundation to understand regulatory compliance for our landfill facilities.

» **Landfill Gas Safe Work Practices** provides basic knowledge about safe work practices when working in and around landfill gas.

» Several more progressive development programs are designed specifically for landfill gas technicians and gatehouse attendants.

Typical courses that our fleet personnel may choose as part of their learning and development include:

» **Fleet 101**: a workshop for new fleet leaders to learn skills required to manage a fleet; Fleet 201 builds upon competencies learned in the 100-level class.

» **Technician Air Brake**: an on-site field course designed to develop and standardize maintenance programs; a similar class is geared toward educating drivers on the functions and inspections of air brake systems.

» **Basic Hydraulics for Refuse Bodies**: field course designed to teach participants about the design and maintenance of the hydraulics features of our fleet.

» **Compass M5**: 15 modules in Waste Management University about shop processes.

» **Lockout/Tagout (LOTO) Awareness**: course to enhance awareness of control of hazardous energy and work under the protection of a LOTO permit; another course is geared toward authorized persons who perform or supervise work requiring a LOTO permit.

» **Hazard Energy Control Programs**: three courses offered in our Hazard Energy Control program to train different levels of employees on working around Hazard Energy Controls.

» **Hands-on training at our Florida Training Center**: Read more about fleet safety training in the Workplace section of this report.

### Transition Assistance

Reorganization is a fact of life in a rapidly changing, dynamic business sector. Waste Management provides transition assistance, including severance benefits and outplacement services, to eligible employees whose employment is terminated in connection with a reorganization event.
Environmental Justice

Our dialogue on issues of environmental justice continues to be highly productive. An overview of our key dialogue on this topic can be found in the Community section of this report.

The chart below shows the distribution of all of Waste Management’s operations. In the upper quadrants are our facilities that are located in communities with above the state average income (measured at the 5 kilometer radius); in the lower quadrants are facilities found in communities with lower than the average income in that state. In the right-hand quadrants are sites located in areas above the state average in non-Hispanic white representation; the left-hand quadrants show facilities in communities under the state average. Our methodology is that employed by noted environmental justice academic experts and by U.S. EPA in its regulatory programs. For more information on the methodology used to formulate this chart, please see p. 35 of the Appendix to our 2010 report.

When we first released this type of demographic footprint for our landfills and waste-to-energy facilities in 2010, we reached out to environmental justice experts to determine whether this was useful and whether our disclosure could be improved. The response was a request to expand our reporting to include all of our facilities, and we provide this here. The following table includes the breakdown of the types of waste and recyclables management facilities we operate and their demographics. The entire picture for Waste Management depicted in the “scatter chart” is generated automatically from a Microsoft Excel chart of our locations, U.S. census data, and state average race and income data.

In 2015, our demographic footprint was modified by under 5 percent due to divestitures and acquisitions. We did not undertake a comprehensive revision of our mapping. We did review the demographics of both divestitures and acquisitions and found their pattern would be somewhat higher in income and lower in non-white representation than our current footprint. We will update this information when a new census is conducted or when Waste Management undergoes an acquisition or divestiture sufficient to change our demographic footprint (whichever comes earlier).

<table>
<thead>
<tr>
<th>Facility type</th>
<th>% of facilities above average income</th>
<th>% of facilities above average white representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoclave</td>
<td>64%</td>
<td>45%</td>
</tr>
<tr>
<td>Landfill gas-to-energy</td>
<td>35%</td>
<td>72%</td>
</tr>
<tr>
<td>Hauling companies</td>
<td>58%</td>
<td>56%</td>
</tr>
<tr>
<td>Medical waste incinerator</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Electronics processing</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>Landfill</td>
<td>41%</td>
<td>68%</td>
</tr>
<tr>
<td>Materials recovery facilities</td>
<td>59%</td>
<td>47%</td>
</tr>
<tr>
<td>Satellite hauling</td>
<td>48%</td>
<td>66%</td>
</tr>
<tr>
<td>Transfer stations</td>
<td>54%</td>
<td>55%</td>
</tr>
<tr>
<td>Waste-to-energy</td>
<td>76%</td>
<td>41%</td>
</tr>
<tr>
<td>Total</td>
<td>48%</td>
<td>58%</td>
</tr>
</tbody>
</table>
Note that each dot on the chart appears in relation to its deviation from the state average (50 percent white representation; 50 percent above-average income). No adjustments or normalization have been made. When the chart is generated by Excel, the quadrants are proportioned to reflect the degree of deviation from the average represented by each axis.

**Stakeholder Engagement**

Waste Management is one of hundreds of national, state and local organizations dedicated to solving environmental and social challenges. This diverse, extensive network helps us understand how we can provide value to the communities in which we operate through environmental stewardship and natural resource conservation.

All of our municipal solid waste and hazardous waste landfills and waste-to-energy facilities have some form of stakeholder engagement process — ranging from formal advisory groups to conservation projects, ongoing service to schools, engagement in local community groups, issuance of newsletters and creation of dedicated facility-specific web pages. Customer feedback is actively solicited at [www.wm.com/contact-us.jsp](http://www.wm.com/contact-us.jsp). The major groups with which we actively engage are listed in the following tables.
# National Partnerships

## Business Associations

<table>
<thead>
<tr>
<th>National Partnership</th>
<th>Business Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTe Powertrain Technologies (advisory board member)</td>
<td>Green Sports Alliance</td>
</tr>
<tr>
<td>ALTe Powertrain Technologies (advisory board member)</td>
<td>Healthcare Waste Institute</td>
</tr>
<tr>
<td>Committee (vice chair)</td>
<td>Manufacturers Alliance for Productivity and Innovation (MAPI) – Ethics and Compliance Council</td>
</tr>
<tr>
<td>American Biogas Council (board member)</td>
<td>National Association of Manufacturers (board member)</td>
</tr>
<tr>
<td>American Chemistry Council (affiliate member)</td>
<td>National Minority Supplier Development Council</td>
</tr>
<tr>
<td>AMERIPEN (board member)</td>
<td>National Waste &amp; Recycling Association (board member)</td>
</tr>
<tr>
<td>Association of General Contractors of America</td>
<td>Natural Gas Vehicles America Council for Responsible Sport (board member)</td>
</tr>
<tr>
<td>Association of Lighting and Mercury Recyclers (board</td>
<td>RCRA Corrective Action Project</td>
</tr>
<tr>
<td>member)</td>
<td>The Recycling Partnership</td>
</tr>
<tr>
<td>Association of Plastics Recyclers (board member)</td>
<td>Securing America's Future Energy (board member)</td>
</tr>
<tr>
<td>Biomass Power Association</td>
<td>Security Industry Association</td>
</tr>
<tr>
<td>Business Council for Sustainable Energy</td>
<td>Society of Corporate Compliance and Ethics</td>
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<tr>
<td>Business for Social Responsibility</td>
<td>Sustainable Brands</td>
</tr>
<tr>
<td>Business Network for Environmental Justice (chair)</td>
<td>Sustainable Packaging Coalition</td>
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<tr>
<td>Coalition for American Electronics Recycling</td>
<td>Sustainable Purchasing Leadership Council</td>
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<tr>
<td>The Coalition for Renewable Natural Gas</td>
<td>Superfund Settlements Project</td>
</tr>
<tr>
<td>Edison Electric Institute (affiliate member)</td>
<td>The Sustainability Consortium (CorpExec council member)</td>
</tr>
<tr>
<td>Energy Security Leadership Council (board member)</td>
<td>Women's Business Enterprise National Council</td>
</tr>
<tr>
<td>Environmental Industry Associations (board member)</td>
<td>Women's Business Enterprise Association (advisory committee)</td>
</tr>
<tr>
<td>Ethics and Compliance Initiative</td>
<td>Women's Business Enterprise National Council</td>
</tr>
<tr>
<td>Food Industry Environmental Council</td>
<td>U.S. DOE National Clean Fleets Partnership</td>
</tr>
<tr>
<td>Geosynthetic Institute (board member)</td>
<td></td>
</tr>
<tr>
<td>GreenBiz</td>
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</table>

## Multistakeholder Groups

<table>
<thead>
<tr>
<th>National Partnership</th>
<th>Multistakeholder Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air &amp; Waste Management Association</td>
<td>International City/County Management Association</td>
</tr>
<tr>
<td>American Institute for Packaging and the Environment</td>
<td>International Security Management Association</td>
</tr>
<tr>
<td>(AMERIPEN) (board member)</td>
<td>Interstate Technology and Regulatory Council — Green and Sustainable Remediation team</td>
</tr>
<tr>
<td>ASIS International</td>
<td>Keep America Beautiful (national board member)</td>
</tr>
<tr>
<td>Association of Climate Change Officers</td>
<td>Keep Brevard Beautiful (Florida)</td>
</tr>
<tr>
<td>ASTM E50.04, Green and Sustainable Corrective Action</td>
<td>Keep Collier Beautiful (Florida)</td>
</tr>
<tr>
<td>Task Group</td>
<td>Keep Florida Beautiful</td>
</tr>
<tr>
<td>The Auditing Roundtable</td>
<td>Keep Houston Beautiful</td>
</tr>
<tr>
<td>Board of Environmental Health &amp; Safety</td>
<td>Keep Texas Beautiful</td>
</tr>
<tr>
<td>California State University Fullerton, College of Natural</td>
<td>Keep Virginia Beautiful (board member)</td>
</tr>
<tr>
<td>Sciences and Mathematics – Sustainability Working Group</td>
<td>National Association of Counties — Resilient Counties Initiative</td>
</tr>
<tr>
<td>(Dean’s Advisory Council member)</td>
<td>National Association of Latino Elected and Appointed Officials</td>
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<tr>
<td>Central Station Alarm Association</td>
<td>National Association of Local Government Environmental Professionals</td>
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<tr>
<td>Chesapeake Bay Foundation</td>
<td>National Black Caucus of State Legislators, Corporate Roundtable</td>
</tr>
<tr>
<td>Climate Action Reserve</td>
<td>National Burglar and Fire Alarm Association</td>
</tr>
<tr>
<td>Construction Materials Recycling Association (board member)</td>
<td>National Environmental Conference Board (board member)</td>
</tr>
<tr>
<td>Crime Stoppers (board member)</td>
<td>National Environmental Justice Conference and Training Program (board member)</td>
</tr>
<tr>
<td>Diversity Best Practices</td>
<td>National League of Cities</td>
</tr>
<tr>
<td>Electronics Recycling Coordination Clearinghouse</td>
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</tr>
<tr>
<td>Environmental Media Association (corporate board member)</td>
<td></td>
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<tr>
<td>Habitat for Humanity</td>
<td></td>
</tr>
<tr>
<td>Institute of Hazardous Materials Management</td>
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</table>
### Multistakeholder Groups (continued)

<table>
<thead>
<tr>
<th>National Recycling Coalition (board member)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast Recycling Council, Electronics Recycling Coordination Clearinghouse (founding member)</td>
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<tr>
<td>Product Stewardship Institute</td>
</tr>
<tr>
<td>Society of Former Special Agents of the FBI</td>
</tr>
<tr>
<td>Solid Waste Association of North America (three board members)</td>
</tr>
<tr>
<td>Sustainable Materials Management Coalition</td>
</tr>
<tr>
<td>Sustainable Remediation Forum (SURF)</td>
</tr>
<tr>
<td>U.S. Composting Council</td>
</tr>
<tr>
<td>U.S. Conference of Mayors — Business Council Steering Committee</td>
</tr>
<tr>
<td>U.S. Conference of Mayors — Climate Protection Council</td>
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<tr>
<td>U.S. EPA Science Advisory Board Work Group on Environmental Justice in Rulemaking</td>
</tr>
<tr>
<td>U.S. Green Building Council</td>
</tr>
<tr>
<td>U.S. Zero Waste Business Council</td>
</tr>
<tr>
<td>Wildlife Habitat Council (chair and board member)</td>
</tr>
</tbody>
</table>

### State Partnerships

| Arizona Chamber of Commerce (board member) |
| Associated Industries of Massachusetts |
| Association of Commerce & Industry — Environment Committee |
| Association of Oregon Recyclers |
| Business and Industry Association — New Hampshire |
| California Chamber of Commerce |
| California Natural Gas Vehicle Coalition (board member) |
| California Refuse Recycling Council |
| California Resource Recovery Association |
| California Waste Association (board member) |
| CALSTART |
| Chemical Industry Council of Illinois |
| Clean Energy Coalition |
| Colorado Association of Commerce & Industry |
| Colorado Motor Carriers Association (board member) |
| First Tee (local chapters; board member) |
| Florida Chamber of Commerce (Board of Governors and Political Institute) |
| Florida Recycling Partnership (board member) |
| Florida TaxWatch |
| Illinois Chamber of Commerce |
| Independent Energy Producers Association |
| Independent Oil and Gas Association |
| Indiana Manufacturers Association |
| Iowa Recycling Association |
| James River Association |
| Leadership New Mexico |
| Marcellus Shale Coalition |
| Maryland–Delaware Solid Waste Association |
| Michigan Chamber of Commerce |
| Michigan Manufacturers Association |
| Michigan Municipal League |
| Michigan Recycling Coalition |
| Michigan Township Association |
| Michigan Waste Industries Association |
| Minnesota Chamber of Commerce — Environment and Natural Resources Committee (vice chair) |
| Minnesota Chamber of Commerce — Waste Subcommittee (chair) |
| Minnesota Clerks & Finance Officers Association |
| Municipal Solid Waste and Resource Advisory Council (chair) |
| National Solid Wastes Management Association — Ohio Chapter (chair) |
| National Solid Wastes Management Association, State Chapters |
| National Waste & Recycling Association (Florida chapter chair) |
| North Dakota Solid Waste & Recycling Association |
| North Central Texas Council of Governments — Resources Conservation Council |
| Ohio Chamber of Commerce Environmental Initiative — Business & Environment Series |
| Ohio Manufacturers’ Association |
| Ohio Environmental Service Industries |
| Ontario Environment Industry Association |
| Ontario Waste Management Association |
| Oregon Refuse & Recycling Association |
| Pennsylvania Business Council |
| Pennsylvania Chamber of Business and Industry |
| Pennsylvania Resources Council |
| Pennsylvania Waste Industries Association |
| Professional Recyclers of Pennsylvania (board member, president) |
| Recycle Florida Today |
| Recycling Association of Minnesota |
| Rethink Recycling |
| Ronald McDonald House |
| Salt Lake City Chamber of Commerce |
| Southern Waste Information eXchange |
| Space Coast Field of Dreams — For Special People With Needs Brevard County |
| State of Texas Alliance for Recycling (board member and officer) |
| Texas Association of Business |
| Texas State Bar |
| Utah Trucking Association |
| Utilities Telecommunications & Energy Coalition of West Virginia (board member) |
### Business Associations (continued)

| Virginia forever (board member) |
| Virginia Recycling Association |
| Virginia Waste Industries Association (chair) |
| Washington State Recycling Association |
| Waste 2 Resources Advisory Committee |
| Waste Cap Resource Solutions |
| West Virginia Chamber of Commerce |
| West Virginia Haulers Association |
| West Virginia Landfill Managers Association |
| West Virginia Oil and Natural Gas Association |
| Western Washington Clean Cities |
| Wisconsin Manufacturers & Commerce |

### Multistakeholder Groups

| American Public Works Association (New York and Michigan) |
| Apogee Retail/Lupus Foundation |
| Associated Recyclers of Wisconsin |
| Association of Minnesota Counties |
| Association of New Jersey Recyclers |
| Association of Washington Businesses |
| Association of Washington Cities |
| Association of Washington Counties |
| The California Climate Action Registry |
| California Cumulative Risk Advisory Committee |
| California Product Stewardship Council |
| California Stormwater Quality Association |
| Children's Hospital of Wisconsin Foundation |
| Clean Energy Coalition, Michigan |
| The Climate Registry |
| Colorado Alliance for Environmental Education |
| Colorado Association for Recycling (board member) |
| Colorado Counties Foundation (board member) |
| Colorado Environmental Coalition |
| Colorado Municipal League |
| Corona Chamber of Commerce (board member) |
| Denton County Behavioral Health Leadership Team (Texas/Oklahoma) |
| Environment Virginia |
| Epilepsy Foundation |
| Federation of Oklahoma Lewisville City Council |
| Goodwill Industries International |
| Greater Oklahoma City Chamber of Commerce (advisory board of directors) |
| Great Plains Institute |
| Greens Bayou Corridor Coalition |
| Illinois Recycling Association |
| Indiana Hunter Education |
| Iowa Governor's Anti-Litter Task Force |
| Iowa League of Cities |
| Ivy Tech College — Sustainable Energy Advisory Board (Indiana) |
| Kansas Energy and Environmental Policy (KEEP) Advisory Group |
| Keep America Beautiful (gold sponsor) |
| Keep America Beautiful — State Chapters (board members and officers) |
| Lake Houston Area Chamber of Commerce |
| Las Virgenes Unified School District — Environmental Stewardship |
| Leadership Council of Southwestern Illinois |
| League of Arizona Cities and Towns |
| League of Minnesota Cities |
| Maryland Commission on Climate Change (commissioner) |
| Maryland Recycling Network (board member) |
| Michigan Association of Environmental Professionals (board member) |
| Michigan Department of Natural Resources — Solid Waste Advisory Committee |
| Minnesota Energy Smart (board member) |
| Minnesota Environmental Initiative (board member) |
| Minnesota Multi Housing Association |
| Minnesota Pollution Control Agency — Construction, Demolition and Industrial Landfill Work Group |
| Minnesota Waste Wise Foundation (board member) |
| Muscular Dystrophy Association |
| National Audubon Society (state chapters) |
| Natural Resources Foundation of Wisconsin |
| New Hampshire Businesses for Social Responsibility |
| New Hampshire Waste Management Council |
| New Mexico Association of Counties |
| New Mexico Environment Department — Working Groups on Environmental Justice and Recycling |
| New Mexico Governor’s Task Force on Greenhouse Gases |
| New Mexico League of Cities and Towns |
| New Mexico Recycling Coalition |
| North Dakota League of Cities |
| Ohio Materials Management Advisory Council |
| Pennsylvania Department of Environmental Protection — Water Resources Advisory Committee’s “Total Dissolved Solids” Stakeholder Group |
| Pennsylvania Environmental Justice Advisory Committee (board member) |
| Pheasants Forever |
| Recycle Florida Today (board member) |
| Regional Greenhouse Gas Initiative |
| Salvation Army |
| SHINE Foundation — Board of Directors (Texas/Oklahoma) |
| Solid Waste Association of North America, State Chapters (board members and officers) |
| Solid Waste Management Districts — Citizens Advisory Boards (multiple — Indiana) |
| Solid Waste Steering Committee for Environment (Texas/Oklahoma) |
Multistakeholder Groups (continued)

State of Texas Alliance for Recycling (board member and legislative committee chair)
Susan G. Komen for the Cure
Texas Audubon Society (board member)
Texas Commission on Environmental Quality — Pollution Prevention Advisory Committee
Texas Society for Ecological Restoration
Texas Association of Environmental Professionals — Treasurer Society

University of Wisconsin Madison Arboretum
U.S. Green Building Council — Los Angeles Chapter
Utah League of Cities and Towns
Utah Recycling Coalition of Utah
Virginia Municipal League
Washington Conservation Voters, Western Climate Initiative
Young Professional Women in Energy (board member)

Local Partnerships

Business Associations

Battle Creek Chamber of Commerce (Michigan)
Canton Road Business Association (board member) (Georgia)
Chamber of Commerce of the Mid-Ohio Valley
Clean Pittsburgh Commission
Duluth Chamber of Commerce (Minnesota)
Eastpointe/Roseville Chamber of Commerce (Michigan)
Ferris Main Streets Advisory Board
Greater Dallas–Fort Worth Recycling Alliance (secretary)
Greater Houston Partnership
Harrison County Chamber of Commerce (Texas)
Houston Bar Association
Kalamazoo County Council of Governments (Michigan)
Local Chambers of Commerce (New Hampshire, Illinois and Indiana) (board members)

North Texas Corporate Recycling Association
Orion Area Chamber of Commerce (Michigan)
Phoenix Chamber of Commerce
Richmond Chamber of Commerce (Virginia)
Rio Rancho Regional Chamber of Commerce (New Mexico)
Simi Valley Chamber of Commerce (board member)
Simi Valley Kiwanis Illegal Dumping Task Force Committee
Southern California Sustainability Support Group
Spokane Chamber of Commerce
Sterling Heights Regional Chamber of Commerce & Industry (Michigan)
Texas Society for Ecological Restoration (secretary)

Multistakeholder Groups

Air Alliance of Houston
Air & Waste Management Association — Alamo Chapter
All-Earth Ecobots Challenge
American Cancer Society — Metro Golf Classic (board member)
American Leadership Forum
American Public Works Association — Monroe County
ARISE Detroit! — Neighborhoods Day
Aurora Economic Development Council (board member)
Bayou Preservation Association (board member)
Belleville Area Council for the Arts
Benedictine University — Business with Science Applications Program (board member)
Big Brothers/Big Sisters (board member)
Boy Scouts of America (multiple chapters in many states)
Boys & Girls Clubs
Bremen Food Pantry (Indiana)
Bucks County Parks and Recreation Board (chair)
Buffalo Bayou Partnership (board member)
Cannon River Watershed Partnership
Chippewa/Luce/Mackinac Conservation District

Christian County, Illinois — Economic Development Corp. (board member)
Churchville-Riga Chamber of Commerce Executive Board (New York)
City and County of Honolulu — Solid Waste Advisory Committee
City of Baltimore — Cleaner Greener Fund
City of Elgin, Illinois — Sustainability Task Force
City of Oklahoma City — Office of Sustainability (steering committee member)
City of Peoria, Illinois — Sustainability Commission
City of Simi Valley, California — Sustainability Committee
Clare County, Michigan, Solid Waste & Recycling Committee (two board members)
CLEAN (Committing to Litter Enforcement and Adopting Neighborhoods) Initiative (Peekskill, New York)
Clinton River Watershed Council
Cobb County Neighborhood Safety Commission (board member)
Community Character Coalition — Elk Grove Village, Illinois
County of Manitowoc — Clean Sweep Program (Wisconsin)
DeKalb County Economic Development Corporation (Illinois)
### Multistakeholder Groups (continued)

- Detroit Green Task Force
- Detroit Motor City Makeover
- Drexel University Office of Research — Biosafety Committee (board member)
- EASE (Emergency Assistance Service Effort) Foundation (Davie, Florida) (board member)
- Fairmont Medical Center
- Friends of the Rouge (current supporter, former board member)
- Green Houston (board member)
- Greater Houston Partnership (board member)
- Hermann Park Conservancy (board member)
- Houston Arboretum & Nature Center (board member)
- Houston Food Bank
- Houston Wilderness (board member)
- Humble ISD Education Foundation (Texas/Oklahoma)
- Illinois Mathematics and Science Partnerships Program — Aurora University
- Junior League of Houston
- Keep America Beautiful Organization — Detroit Keep It Moving
- Keep Saginaw Beautiful
- King County Solid Waste Advisory Committee
- Lake Orion Education Foundation
- Lake St. Clair South Channel Light Keepers
- LaSalle County, Illinois — Citizens Advisory Board
- Leadership Broward (Broward County, Florida)
- Leadership Houston (board member)
- Leadership Houston (board member)
- Life Time Fitness — Torchlight 5k
- Macomb Conservation District (supporter)
- Marquette Area Blues Society
- Massachusetts Audubon Society
- Memmack Valley Economic Development Council, Inc. (Lawrence, Massachusetts)
- Michigan Alliance of Environment and Outdoor Education Educators
- Michigan Association of Environmental Professionals (board member) and chair of environmental education grant committee
- Minoa, Illinois, High School Athletic Boosters — golf outing fundraiser committee
- Monroe County Recycling Advisory Committee
- Montgomery County Keep America Beautiful (Ohio)
- National Wild Turkey Federation (Tioga Chapter, Indiana)
- Nat Moore Foundation
- The Nature Conservancy of Houston (board member)
- Neighborhood House, Peoria, Illinois
- New York City Center for the Urban Environment
- Orion Art Center
- Orion Boys & Girls Club
- Orion Solid Waste Committee (committee member)
- Orion Township — “Look for the Good” Campaign
- Orion Township, Recycling Committee
- The Park People (board member)
- Partners in Education (Broward County, Florida)
- Pheasants Forever Chapters (board member)
- Portland Metro Solid Waste Advisory Committee
- Recycling Task Force, Solid Waste Agency, Lake County, Illinois
- Relay for Life
- Richmond Regional Youth Facility
- Roundy’s Foundation/Milwaukee Public Library
- Saugus Business Education Collaborative (Saugus, Massachusetts) (board member)
- SEARCH (board member)
- Seattle Solid Waste Advisory Committee
- Simi Valley Boys & Girls Club (board member)
- Simi Valley Cultural Arts Association (board member)
- Simi Valley Education Foundation (board member)
- Simi Valley Family YMCA (board member)
- Simi Valley Police Foundation (board member)
- Simi Valley Police Officers Association (board member)
- Six Rivers Land Conservancy
- South Baltimore Learning Center (board member)
- Southside Manor Apartments, Peoria, Illinois
- St. James Farm Forest Preserve (volunteer)
- Suburban Cities Association
- Sun Valley Beautiful
- Sustainable DC Working Group
- Swim Teal Lake — Diabetes Benefit
- Taylorville, Illinois, Development Association (board member)
- Taylorville, Illinois, Memorial Hospital (board member)
- Three Rivers Festival Committee (Channahon, Illinois)
- University of Southern California — Sustainable Enterprise Executive Roundtable (SEER) Project
- Urban League (local board member)
- U.S. Green Building Council — Inland Empire Chapter
- Ventura County Economic Development Association
- Village of Lake Orion Downtown Development Authority
- Washington DC Metropolitan Scholars (board members)
- Waterfowl USA (supporter)
- Will County, Illinois, Center for Economic Development
- Wisconsin Clean Cities, Southeast Area
- Women in Distress, Inc.
- Women’s Center (board member)
- YMCA of Miami-Dade County
- YMCA of Broward County
GRI Content Index
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<thead>
<tr>
<th>Standard Disclosure</th>
<th>Description</th>
<th>Response</th>
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<td><strong>General Standard Disclosures</strong></td>
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<tr>
<td><strong>Strategy and Analysis</strong></td>
<td></td>
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<tr>
<td>G4-1</td>
<td>Statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization’s strategy for addressing sustainability.</td>
<td>Company – CEO Message (pp. 3-4)</td>
</tr>
<tr>
<td><strong>Organizational Profile</strong></td>
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<tr>
<td>G4-3</td>
<td>Name of the organization.</td>
<td>Waste Management</td>
</tr>
<tr>
<td>G4-4</td>
<td>Primary brands, products, and services.</td>
<td>Company – Business Mix (pp. 6-7)</td>
</tr>
<tr>
<td>G4-5</td>
<td>Location of the organization’s headquarters.</td>
<td>Company – Business Summary (p. 5)</td>
</tr>
<tr>
<td>G4-6</td>
<td>Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.</td>
<td>10-K (pp. 4, 131-132)</td>
</tr>
<tr>
<td>G4-7</td>
<td>Nature of ownership and legal form.</td>
<td>10-K (p. 3)</td>
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<td>G4-8</td>
<td>Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).</td>
<td>10-K (pp. 4-8); Company – Business Summary (p. 5); Business Mix (pp. 6-7)</td>
</tr>
<tr>
<td>G4-9</td>
<td>Scale of the organization.</td>
<td>Business Summary (p. 5)</td>
</tr>
<tr>
<td>G4-10</td>
<td>A. Total number of employees by employment contract and gender.</td>
<td>Workplace – Diversity &amp; Inclusion (pp. 66-67)</td>
</tr>
<tr>
<td></td>
<td>B. Total number of permanent employees by employment type and gender.</td>
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<tr>
<td></td>
<td>C. Total workforce by employees and supervised workers and by gender.</td>
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<tr>
<td></td>
<td>D. Total workforce by region and gender.</td>
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<tr>
<td></td>
<td>E. Whether a substantial portion of the organization’s work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors.</td>
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<tr>
<td></td>
<td>F. Any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).</td>
<td></td>
</tr>
<tr>
<td>G4-11</td>
<td>Percentage of total employees covered by collective bargaining agreements.</td>
<td>Workplace Appendix – Collective Bargaining (p. 123)</td>
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<td>Description of organization’s supply chain.</td>
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<td>Any significant changes during the reporting period regarding the organization’s size, structure, ownership or its supply chain.</td>
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<td>Whether and how the precautionary approach or principle is addressed by the organization.</td>
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<td>Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.</td>
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<td>Memberships of associations (such as industry associations) and national or international advocacy.</td>
<td>Community Appendix – Stakeholder Engagement (pp. 127-132)</td>
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### Identified Material Aspects and Boundaries

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| G4-17               | A. All entities included in the organization’s consolidated financial statements or equivalent documents.  
B. Whether any entity included in the organization’s consolidated financial statements or equivalent documents is not covered by the report. | Company – About This Report (pp. 8-10), 10-K (pp. 103-131) |
| G4-18               | A. The process for defining the report content and the Aspect Boundaries.  
B. How the organization has implemented the Reporting Principles for Defining Report Content. | Company – About This Report (pp. 8-10) |
| G4-19               | All the material Aspects identified in the process for defining report content. | Company – About This Report |
| G4-20               | For each material Aspect, the Aspect Boundary within the organization. | Company – About This Report |
| G4-21               | For each material Aspect, the Aspect Boundary outside of the organization. | Company – About This Report |

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<td>G4-22</td>
<td>The effect of any restatements of information provided in previous reports, and the reasons for such restatements.</td>
<td>Any restatements, and reasons for such, are footnoted as part of the data presentation within the body of the report.</td>
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<td>G4-23</td>
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<td>Changes have been noted in footnotes where applicable.</td>
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<th>List of stakeholder groups engaged by the organization.</th>
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<td>G4-26</td>
<td>Organization’s approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.</td>
<td>Community – Stakeholder Engagement (pp. 90–91), Company – About This Report (pp. 8–10)</td>
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<tr>
<td>G4-27</td>
<td>Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. The stakeholder groups that raised each of the key topics and concerns.</td>
<td>Community – Stakeholder Engagement (pp. 90–91), Company – About This Report (pp. 8–10); Community Appendix – Environmental Justice (pp. 126–127)</td>
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### Report Profile

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<td>G4-30</td>
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<td>Company – About This Report (p. 8)</td>
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</table>
| G4-31              | Contact point for questions regarding the report or its contents.       | Toni Beck  
Vice President, Corporate Communications and Community Relations  
tbeck3@wm.com  
(713) 394-5093  
Sue Briggs  
Vice President, State and Federal Public Policy  
sbrigum@wm.com  
(202) 639-1219 |
| G4-32              | A. ‘In accordance’ option the organization has chosen.                  | Company – About This Report (p. 8); GRI Content Index (pp. 1–8) |
|                    | B. GRI Content Index for the chosen option.                            |                                   |
|                    | C. Reference to the External Assurance Report, if the report has been externally assured. |                                   |
| G4-33              | A. Organization’s policy and current practice with regard to seeking external assurance for the report. | Company – About This Report (p. 8) |
|                    | B. If not included in the assurance report accompanying the sustainability report, the scope and basis of any external assurance provided. |                                   |
|                    | C. Relationship between the organization and the assurance providers.   |                                   |
|                    | D. Whether the highest governance body or senior executives are involved in seeking assurance for the organization’s sustainability report. |                                   |

### Governance

| G4-34              | Governance structure of the organization, including committees of the highest governance body; committees responsible for decision-making on economic, environmental and social impacts. | Company Appendix – Governance (p. 95) |

### Ethics and Integrity

| G4-56              | Organization’s values, principles, standards and norms of behavior such as codes of conduct and codes of ethics. | Company Appendix – Code of Conduct (pp. 100–101) |
## Specific Standard Disclosures

### Economic

#### Economic Performance

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<td>Direct economic value generated and distributed</td>
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<td>G4-EC2</td>
<td>Financial implications and other risks and opportunities for the organization’s activities due to climate change</td>
<td>Company Appendix – Risks and Opportunities Related to Climate Change (pp. 99-100)</td>
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<td>G4-EC3</td>
<td>Coverage of the organization’s defined benefit plan obligations</td>
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#### Market Presence

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<td>Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation</td>
<td>100% of the standard entry level wage for both male and female employees exceeds local minimum wage.</td>
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<tr>
<td>G4-EC6</td>
<td>Proportion of senior management hired from the local community at significant locations of operation</td>
<td>67% of senior management were hired locally when they started their careers at WM. We define “hired locally” as within commuting distance of a facility.</td>
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#### Indirect Economic Impacts

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#### Energy

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<td>Operations – Energy &amp; GHG Footprint (pp. 55-57); Waste Solutions – Waste-Based Energy (pp. 44-46); Innovation (pp. 47-48)</td>
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<td>Reduction of energy consumption</td>
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<td>Waste Solutions – Recycling (pp. 29-39); Organics (pp. 40-43); Waste-Based Energy (pp. 44-46); Innovation (pp. 47-48); Operations – Energy &amp; GHG Footprint (pp. 55-57)</td>
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<td>Operations Appendix – Environmental Compliance (pp. 107-125)</td>
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<td>G4-EN32</td>
<td>Percentage of new suppliers that were screened using environmental criteria</td>
<td>100% are screened based on environmental criteria as outlined in our supplier code of conduct. See also Company Appendix – Supply Chain (pp. 101-104)</td>
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<td>G4-EN33</td>
<td>Significant actual and potential negative environmental impacts in the supply chain and actions taken</td>
<td>Company Appendix – Supply Chain (pp. 101-104)</td>
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<td>Operations Appendix – Environmental Management (p. 13)</td>
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<td>G4-EN34</td>
<td>Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms</td>
<td>The system utilized to track grievances is discussed in Operations Appendix, Environmental Management System, Communications. We do not disclose a specific number, given the broad nature of grievances logged.</td>
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<td>G4-LA1</td>
<td>Total number and rates of new employee hires and employee turnover by age group, gender and region</td>
<td>Workplace – Engagement &amp; Retention (pp. 68-70)</td>
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<td>G4-LA2</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation</td>
<td>Workplace Appendix – Employee Benefits (pp. 123-124)</td>
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</tr>
<tr>
<td>G4-LA6</td>
<td>Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender</td>
<td>Workplace – Safety (p. 73)</td>
</tr>
<tr>
<td>Training and Education</td>
<td></td>
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</tr>
<tr>
<td>G4-DMA</td>
<td>Generic Disclosures on Management Approach</td>
<td>Workplace – Engagement &amp; Retention (pp. 68-70)</td>
</tr>
<tr>
<td>G4-LA9</td>
<td>Average hours of training per year per employee by gender, and by employee category</td>
<td>Workplace – Engagement &amp; Retention (pp. 68-70); Safety (pp. 74-75)</td>
</tr>
<tr>
<td>G4-LA10</td>
<td>Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings</td>
<td>Workplace – Engagement &amp; Retention (pp. 68-70); Workplace Appendix – Training &amp; Development (pp. 124-125)</td>
</tr>
<tr>
<td>Diversity and Equal Opportunity</td>
<td></td>
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<tr>
<td>Standard Disclosure</td>
<td>Description</td>
<td>Response</td>
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<tr>
<td>G4-DMA</td>
<td>Generic Disclosures on Management Approach</td>
<td>Workplace – Diversity &amp; Inclusion (pp. 65-67)</td>
</tr>
<tr>
<td>G4-LA12</td>
<td>Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity</td>
<td>Workplace – Diversity &amp; Inclusion (pp. 66-67)</td>
</tr>
<tr>
<td><strong>Human Rights</strong></td>
<td></td>
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<tr>
<td><strong>Freedom of Association and Collective Bargaining</strong></td>
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<tr>
<td>G4-DMA</td>
<td>Generic Disclosures on Management Approach</td>
<td>Workplace Appendix – Human Rights (pp. 122-123)</td>
</tr>
<tr>
<td>G4-HR4</td>
<td>Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights</td>
<td>We have not identified any operations or suppliers in which employee rights to exercise freedom of association and collective bargaining have been violated or are at significant risk.</td>
</tr>
<tr>
<td><strong>Human Rights Grievance Mechanisms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-DMA</td>
<td>Generic Disclosures on Management Approach</td>
<td>Workplace Appendix – Human Rights (pp. 122-123); Company Appendix – Code of Conduct (pp. 100-101)</td>
</tr>
<tr>
<td>G4-HR12</td>
<td>Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms</td>
<td>Workplace Appendix – Human Rights (pp. 122-123)</td>
</tr>
<tr>
<td><strong>Society</strong></td>
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<tr>
<td><strong>Local Communities</strong></td>
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<tr>
<td>G4-DMA</td>
<td>Generic Disclosures on Management Approach</td>
<td>Community (pp. 77-91)</td>
</tr>
<tr>
<td>G4-SO1</td>
<td>Percentage of operations with implemented local community engagement, impact assessments, and development programs</td>
<td>Community – Stakeholder Engagement (pp. 90-91); Community Appendix – Environmental Justice (pp. 126-127); Waste Management 2010 Sustainability Report Appendix (p. 35)</td>
</tr>
<tr>
<td>G4-SO2</td>
<td>Operations with significant actual and potential negative impacts on local communities</td>
<td>Community – Stakeholder Engagement (pp. 90-91); Community Appendix – Environmental Justice (pp. 126-127)</td>
</tr>
<tr>
<td><strong>Anti-Corruption</strong></td>
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<td>G4-DMA</td>
<td>Generic Disclosures on Management Approach</td>
<td>Company Appendix – Code of Conduct (pp. 100-101)</td>
</tr>
<tr>
<td>G4-SO3</td>
<td>Total number and percentage of operations assessed for risks related to corruption and the significant risks identified</td>
<td>Company Appendix – Code of Conduct (pp. 100-101); Risk Management (pp. 97-99)</td>
</tr>
<tr>
<td><strong>Public Policy</strong></td>
<td></td>
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<tr>
<td>G4-DMA</td>
<td>Generic Disclosures on Management Approach</td>
<td>Company Appendix – Public Policy (pp. 104-106)</td>
</tr>
<tr>
<td>G4-SO6</td>
<td>Total value of political contributions by country and recipient/beneficiary</td>
<td>Company Appendix – Public Policy (pp. 104-106)</td>
</tr>
<tr>
<td><strong>Supplier Assessment for Impacts on Society</strong></td>
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<tr>
<td>G4-DMA</td>
<td>Generic Disclosures on Management Approach</td>
<td>Company Appendix – Supply Chain (pp. 101-104)</td>
</tr>
<tr>
<td>G4-SO9</td>
<td>Percentage of new suppliers that were screened using criteria for impacts on society</td>
<td>Company Appendix – Supply Chain (pp. 101-104)</td>
</tr>
<tr>
<td><strong>Product Responsibility</strong></td>
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<td><strong>Compliance</strong></td>
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<td>G4-DMA</td>
<td>Generic Disclosures on Management Approach</td>
<td>Operations Appendix – Environmental Compliance (pp. 107-125)</td>
</tr>
<tr>
<td>G4-PR9</td>
<td>Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services</td>
<td>Operations Appendix – Environmental Compliance (p. 108)</td>
</tr>
</tbody>
</table>