# 2016 Sustainability Fact Sheet

Today's customers want to know that the waste they generate is handled in the smartest way possible. They want solutions that are better for the environment and, at the same time, better for the bottom line. They want services that focus on reducing, recycling and recovering waste. And more. They want waste to be used in beneficial ways, like generating renewable energy or creating alternative fuels that vehicles can run on. They want options for every waste stream, whether it comes from a house, restaurant, hospital or elsewhere. And so do we.

Waste Management is the largest environmental solutions provider in North America, serving more than 21 million municipal, commercial and industrial customers in the U.S. and Canada. We recognize that the best way to build a stronger company is to listen closely to what customers want and then deliver. That's why we have invested in developing waste solutions for a changing world. Today, this includes not just disposal and recycling, but personal counseling to help customers achieve their green goals, including zero waste.

We're focused on raising awareness of the urgent need to get serious about recycling — its economics and its environmental value. Putting recycling on its best foot for the future means acknowledging some very real challenges facing the recycling industry, including a changing waste stream, slowing global demand, low commodity prices and rising processing costs. Here are a few ways we're adapting:

- » As more complex plastics as well as non-recyclable materials enter our waste stream, the cost to process recycling is rising. And as foreign economies have slowed, demand for U.S. commodities, like plastic, has dipped. In response, we've tightened our belts on our recycling operations, increased our efficiencies and lowered operating costs.
- » Contamination loose plastic bags and other "tanglers" that wrap around the recycling equipment, bagged trash in the recyclables, and food and liquid waste –lowers the value of clean recyclables. We're working with customers, communities, and environmental organizations across the country to get the word out on contamination and reinvigorate a spirit of environmental stewardship.
- » Our approach is working: recycling education partnerships with municipal customers have led to decreased contamination in cities like Springfield, Massachusetts; Elgin, Illinois; and Siler City, North Carolina.
- » We're focused on the language and tangible benefits of life cycle thinking, considering every piece of the sustainable materials management chain. This is a departure from the emphasis in previous years on weight-based goals for waste reduction. While such goals are well-intentioned, we believe they decouple the action of recycling from this purpose.

- » We're using life cycle analysis to project the benefits for our waste reduction consulting services, recycling and renewable energy production. Knowing the environmental benefits and their economic cost helps our customers understand where they get the greatest "bang for the buck" in materials management.
- » Waste Management is setting ambitious benchmarks for improvement. But we're not waiting for a framework mandating reductions. We're framing our sustainability goals in terms of opportunity to reduce carbon emissions and to preserve natural resources.
- » As a company, we are a net greenhouse gas reducer and by a lot. In 2015, Waste Management's 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 greenhouse gas emissions our 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 are actively promoting the use of industrial property to help support the health of pollinators.



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### Goals & Progress

As we approach 2020, the target year for the sustainability goals we set in 2007, we are beginning to reflect on how far we've come, where our goals need to be refined and where we need to go 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's what we found.

WHAT WE TARGETED: Recycle 20 million tons annually by 2020.						
WHAT WE LEARNED	WHY IT MATTERS					
We've discovered that evaluating success based on the weight of recyclables we manage is less informative than it could be. In our 2016 Sustainability Report and going forward, we're transitioning our recycling metrics to the measurement of greenhouse gas (GHG) emissions avoidance and energy savings.	This change is consistent with the premise of the U.S. EPA's Sustainable Materials Management program and Sustainable Materials Management Coalition. This life-cycle approach will allow us to be more transparent in communicating environmental benefits.	Recyclables Managed (million tons)				
<b>WHAT WE TARGETED:</b> Reduce the carbon dioxide emissions and improve the efficiency of our fleet by 15 percent by 2020.						
WHAT WE LEARNED	WHY IT MATTERS					
We met – and exceeded – our goal. Our on-road fleet efficiency	Our on-road vehicles run on diesel, gasoline and natural gas, some	On-Road Fleet Emissions Reductions				

goal. Our on-road fleet efficiency has now increased by 24 percent over 2007 levels. We will report on our fleet's performance in greater detail in 2016 and beyond. Our on-road vehicles run on diesel, gasoline and natural gas, some of which is renewable natural gas (RNG) generated from our landfills. In the future, we will clearly identify where we are using this renewable fuel and the GHG reductions it's enabling.

[percent reduction in million metric tons carbor dioxide equivalent (MtCO2e) emissions]

2007 emissions: **1.94 million** metric tons CO2e

2007 2012 2013 2014 2015 2020



Wildlife Habitat

2007 2012 2013 2014 2015 2020 GOAL

## **WHAT WE TARGETED:** Produce enough waste-based energy to meet the annual energy needs of 2 million households.

WHAT WE LEARNED	WHY IT MATTERS		
With the sale of Wheelabrator Technologies in 2014, 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 RNG), but will reset our target number.	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. We look forward to continuing to promote its use.	Waste-Based Energy Production (million households)	200 015 2020 GOAL

### **WHAT WE TARGETED:** Establish 100 wildlife habitat programs and protect 20,000 acres at Waste Management sites by 2020.

WHAT WE LEARNED	WHY IT MATTERS		
We attained these goals in 2010 and have maintained them through 2015. Our 2016 materiality	Environmental stewardship is consistent with our business goal of being a trusted community	Number of Acres Protected	Number of Programs
review identified impact on local environment as a key issue, and we'll be thinking about stewardship more broadly in the future.	partner. As our development of alternatives to land-based waste management increases, we must continue to engage and educate local communities on caring for the environment.	25,000	134 24