



# We make it our business to Think Green® every day.



When we Think Green®, we think of a world where every citizen, every community, every company and every one of our employees is doing whatever it takes to ensure a safe and sustainable future.

David P. Steiner
Chief Executive Officer

This report updates the 2005 Waste Management environmental report. For this year's text, we looked to the Global Reporting Initiative (GRI) for guidance on selection of goals and metrics material to the company's environmental and social footprint, and for the general scope of this report on environmental and social indicators (although we are not reporting "in accordance with" GRI). The general time frame for reporting is 2005 through 2007, with reference to particularly notable events in 2008 where information was available prior to publication.

#### Letter from the CEO



# From collection to recycling to disposal of the 4.6 pounds of waste per person North Americans generate each day, the world is a better place because of Waste Management.

Most people identify us by our green trucks and green bins. They think of us as a garbage company. They don't see us as the environmental services company that provides the sustainability platform for families, businesses and municipalities.

That's why, in October 2007, I spoke at the <u>World Business Forum</u> in New York to begin the process of educating the world on how we extract the value from waste in ways that protect and enhance the environment. I reaffirmed our commitment to help companies thrive and prosper through business practices that are synonymous with responsible social and environmental practices.

You see, our company has a goal — to help ensure that we pass on the planet to the next generation in better shape than we inherited it. This is a lofty goal, and we can't do it alone, but we hope to set an example for others to follow. Our world and the people who inhabit it are worthy of our highest aspirations and our best efforts, so I set out the following four goals for Waste Management to achieve by the year 2020:

When we Think Green, we think of a world with so many clean alternative ways to produce power that the threat of exhausting our natural resources is forever

put to rest. Waste is a <u>renewable energy source</u>. Today we use it to create enough energy to power more than 1 million homes every year. That's the equivalent of replacing 14 million barrels of oil or 4.1 million tons of coal every year. **By 2020, we expect to double that output and power more than 2 million homes.** 

Landfill-gas-to-energy plants convert a powerful greenhouse gas, methane, into a power source. Through our efforts to increase the number of these plants, we're adding 22 megawatts of energy production just this year, and we are in the process of constructing 10 new plants that will produce an additional 50 megawatts of power.

When we Think Green, we think of a world where "reduce, reuse and recycle" become the watchwords of every family and company in North America. We know a lot about minimizing — and eliminating — waste. And, as North America's <a href="Iargest residential recycler">Iargest residential recycler</a>, we are committed to doing just that. By 2020, we expect to triple the amount of recyclable materials we manage, from 8 million to more than 20 million tons. Part of that is coming from increased volumes as we use single-stream technology to make recycling easier for consumers. Our single-stream volumes are up nearly 15 percent over last year because

Together, we can become more efficient, engineering products using fewer valuable resources, designing products to recover the raw materials in them when they can no longer be reused, and innovating to convert waste products into new products or renewable energy at the end of their life.

of these efforts. We're further increasing volumes through new offerings like electronics recycling, with great success. E-cycling volumes have increased about 29 percent this year. We're even helping customers attain their "zero waste" goals.

We think of a world where companies take a leadership position by investing in cleaner technologies so that pollution becomes a thing of the past. At Waste Management we are taking the lead in developing technologies to enhance the waste business and reduce our carbon impact. Today, we have 26,000 vehicles in our fleet. Over the next 10 years, we will ask our suppliers to develop a truck that improves the fuel efficiency of our fleet by 15 percent and reduces fleet emissions by 15 percent. With Waste Management expecting to spend more than \$450 million per year on new trucks, that's a strong incentive for manufacturers to create a breakthrough technology for a new hybrid engine. In fact, we are working with four suppliers on different technologies for hybrid trucks and heavy equipment, each in a different stage of testing but all showing promise. And we are partnering with a leading non-governmental organization and other companies to develop additional incentives to bring heavy-duty hybrid technology to the marketplace.

We think of a world where the environment is respected and every action is aimed at recovery and restoration. By 2020, we want Waste Management to achieve a fourfold increase in the number of our wildlife habitats certified by the Wildlife Habitat Council. That means at least 100 of our landfills will have a total of more than 25,000 acres set aside for conservation and wildlife habitat — an area more than one-and-a-half times the size of Manhattan Island. We've made tremendous progress. As of November 2008, we had received certifications on a total of 49 landfills and had protected a total of about 21,000 acres.

We think of a world where we partner with our customers to use our knowledge and experience to their benefit and the benefit of the planet, leading them to new, sustainable solutions and working with every link in the supply chain to address the entire life cycle of a product. Together, we can become more efficient, engineering products using fewer valuable resources, designing products to recover the raw materials in them when they can no longer be reused, and innovating to convert waste products into new products or renewable energy at the end of their lives.

We recognize that accountability is important. We have committed to reporting on our progress toward achieving our sustainability goals, as well as progress on other key sustainability metrics relevant to our business. To that end, we are very pleased to publish this sustainability report for your information.

Lastly, we think of a world where our commitment to excellence and leadership has positioned us to deliver lasting solutions to the environmental challenges our planet will face in the 21st century. All 46,000 employees of Waste Management believe that nothing is more important than family. I have three young boys, and I look forward to creating a sustainable tomorrow for all of our children and our children's children.

Sincerely,

David P. Steiner Chief Executive Officer



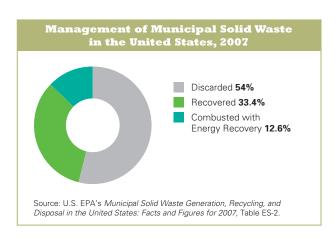
## Our journey toward sustainability

For years, Waste Management has served as North America's premier environmental service provider. As we have advanced the technologies we employ, and as our customers increasingly seek waste reduction, recycling, reuse, and safe treatment and disposal options, our company's service capabilities have evolved. Our goal is to be the premier source for our customers' sustainable environmental solutions.

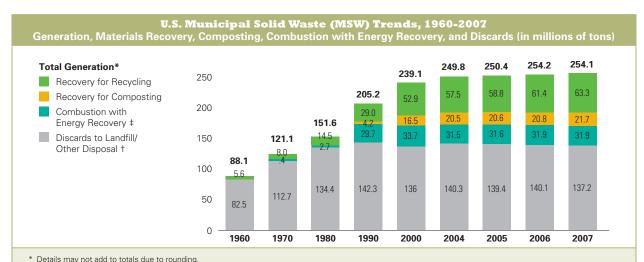
#### Where we are now

The population of the United States generated more than 250 million tons of garbage in 2007.1 In the most recently reported year, business and industry also generated 38 million tons of hazardous waste.<sup>2</sup> At Waste Management, our job is to manage our customers' wastes: advising on waste reduction and recycling, extracting energy from otherwise wasted materials, and safely disposing of what remains. We share our customers' goals of wasting nothing.

This spirit of conservation has been evolving both in the U.S. and in our company. Over the past 50 years, the U.S. Environmental Protection Agency (U.S. EPA) has tracked a steady evolution from waste disposal to recycling and generation of renewable, waste-based energy. Although waste generation has been increasing as the population grows, so has the capacity to turn wastes into resources.



Waste Management has followed a similar path, evolving from waste collection and disposal in the 1960s to today's mix of business increasingly emphasizing energy production from waste, recycling, and innovative ways to reduce waste generation. Waste Management's vision is to steadily increase the volume of waste turned into



- ‡ Includes combustion of MSW in mass burn or refuse-derived fuel form, and combustion with energy recovery of source-separated materials in MSW (e.g., wood pallets and tire-derived fuel).
- † Discards after recovery minus combustion with energy recovery. Discards include combustion without energy recovery. Adapted from U.S. EPA's Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2007, Table ES-1.

<sup>&</sup>lt;sup>1</sup> http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw07-rpt.pdf.

<sup>&</sup>lt;sup>2</sup> http://www.epa.gov/osw/inforesources/data/br05/national05.pdf.

resources through recycling and energy recovery. As a company, we're turning more waste into valuable resources than the national average. Indeed, as the nation's leader in environmental services, we have played a major role in the national progress. We plan to accelerate this trend. Fifty-one percent of Waste Management's total revenue in 2007 came from managing "discards": 45 percent from collecting the average person's 4.6 pounds of waste per day and transporting it and businesses' waste for disposal, and 6 percent from disposal at "traditional" landfills (i.e., landfills without green energy production). Forty-nine percent of Waste Management's revenues came from "green" services: 14 percent from recycling, 13 percent from green energy-producing landfills, and 21 percent from collection for recycling and green energy production. Our newest innovative service lines (described on pages 37 and 42) comprised 1 percent of revenues in 2007, and we intend to grow these services to become the nation's leader in waste reduction, recycling and reuse as well as the production of energy from waste.

Waste Management's achievement in driving more sustainable waste services is well recognized. In 2007, for the third straight year, Waste Management was named to the Dow Jones Sustainability Index (DJSI), a selection of companies judged on their global leadership in sustainability and economic performance. For all three years, Waste Management far outperformed the average DJSI score for the waste and disposal service sector.





**Traditional Collection/Transfer:** Includes traditional collection and transfer station lines of business.

**Traditional Landfill:** Includes revenues from disposal in landfills not used for energy recovery. Hazardous waste revenue is included in this category.

**Green Collection/Transfer:** Includes inter-company revenues from collection/transfer station operations to Waste Management "green" facilities (landfills generating energy, waste-to-energy facilities, recycling facilities).

**Green Energy Production Facilities:** Includes Wheelabrator green energy facilities, Waste Management renewable energy and landfill-gas-to-energy facilities, and landfills with bioreactors.

Recycling: Includes Waste Management Recycle America, Recycling Material Sales, landfill revenues from Revenue Generating Cover and Redirected Waste, and recycling revenue within the collection line of business.

**Newest Innovative Service Lines:** Includes Organic Growth Group/Upstream revenues (see pages 37 and 42).

Dow Jones Sustainability Index Performance												
	T	otal Sco	re	Environn	nental D	imension	Soci	al Dime	nsion	Econo	mic Dim	nension
	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
Waste Management	56	56	55	51	51	47	54	59	57	69	60	68
Sector Average	32	29	33	19	19	22	33	32	36	57	45	51



# Where we are going

2007 was the year Waste Management elevated <u>Think Green</u>® from a company theme to a strategic plan for sustainability. We see sustainability as our fundamental service — providing environmental solutions and protection for our customers and communities, while maintaining a successful and growing business.

The four key sustainability goals we <u>announced</u> in 2007 are designed to accelerate the conversion of waste to resource and to support the company's path of sustainable growth.

#### Specifically, the company plans to:

- Increase waste-based energy production. Today, we create enough energy to power 1 million homes each year.

  By 2020 we expect to double that output, producing enough energy for the equivalent of more than 2 million homes.
- Increase the volume of recyclable materials processed. We currently manage 8 million tons of recyclables; by 2020 we plan to manage more than 20 million tons.
- Direct capital spending of up to \$500 million per annum over a 10-year period to increase the fuel efficiency
  of our fleet by 15 percent and reduce fleet emissions by 15 percent by 2020. We also expect to invest in
  technologies to enhance the sustainability of our basic waste services.
- Preserve and restore wildlife habitat across North America. By 2020, we plan to increase by more than four times the number of our facilities from 24 to 100 certified by the Wildlife Habitat Council, and increase the number of acres we have set aside for conservation and wildlife habitat to approximately 25,000.

These goals were not developed in a vacuum. We benchmarked other leading corporations on their sustainability initiatives. We worked with a range of stakeholders — from local governments, to national environmental organizations, to federal and state regulators, to businesses large and small — to determine how we can best serve our communities and customers who have expanding service needs. We received invaluable input on how to evaluate our sustainability and the kinds of goals that would make a difference. We then challenged our own operational divisions to come up with stretch — but potentially achievable — goals in four key areas. And we have committed to public reporting each year on the progress we make.

# How we are getting there

#### **Our** assets

Waste Management is the leading provider of comprehensive waste reduction, recycling, energy recovery, and collection and disposal services in North America, serving nearly 20 million residential, industrial, municipal and commercial customers. Our national coverage and mix of assets allow us to maximize recycling and waste-based energy generation with efficiencies translating into higher resource recovery.

#### **Key sustainability capabilities**

#### 1. Waste-based energy.

Waste-to-energy. Garbage is a renewable energy source,<sup>3</sup> and our Wheelabrator subsidiary is a major producer of this green energy. The U.S. Environmental Protection Agency says waste-to-energy technology produces electricity "with less environmental impact than almost any other source of electricity." Every ton of municipal solid waste (MSW) processed in a waste-to-energy facility provides the renewable energy that could avoid coal mining or oil importation, and it reduces the emission of carbon dioxide.<sup>5</sup>

Waste-to-Energy Benefits Per One Ton MSW Processed				
Coal mining avoided	Oil importation avoided	CO <sub>2</sub> emissions avoided		
More than 1/4 ton*	1 barrel	1 ton		

\* Dr. Nickolas Themis, The Earth Institute, Columbia University.

Studies demonstrate that recycling rates in communities with waste-to-energy facilities slightly *exceed* those of the statewide average for recycling. An effective waste service combines waste-to-energy and recycling; the two do not compete.<sup>6</sup>

# Waste Management Operating Facilities as of December 2007

354 collection operations

341 transfer stations

271 active MSW landfills

7 active hazardous waste facilities

16 waste-to-energy plants

105 recycling facilities (including 29 single-stream)

108 landfill gas projects

5 independent power production plants (including 2 renewable energy)

# Waste Management Waste-Based Energy\* Production

Equivalent number of households that could be powered by WM's energy production

 2007 Actual
 1 million

 2020 Goal
 2 million

\* Waste-based energy includes Wheelabrator's waste-to-energy facilities, WM's landfill-gas-to-energy facilities and, in the future, third-party facilities that WM builds or operates.

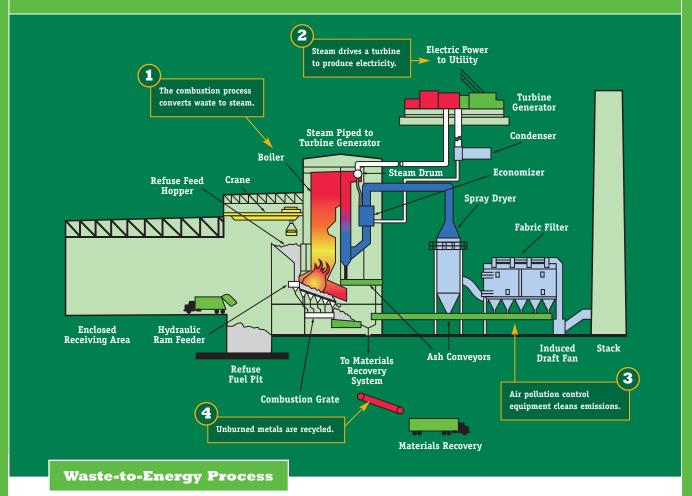
In addition to the 16 <u>waste-to-energy plants</u> that it operates, Wheelabrator owns and operates two additional plants that produce renewable energy using waste wood, landfill gas and tires as fuel. In 2007, Wheelabrator's renewable energy facilities produced over 5 million megawatt-hours of renewable energy, enough electricity to provide the energy needs of 760,000 homes.

# Resource Savings Potentially Achieved Through Wheelabrator's Waste-to-Energy, Waste Wood, and Waste Tire Renewable Energy Plants\*

	maste week, and waste into hence waste interest, i tamis				
Year	Gross MWH/Year	Energy equivalent in homes powered**	Energy equivalent in tons of coal potentially offset	Energy equivalent in barrels of oil importation potentially avoided	
2007	5,221,000	760,000	2,224,000	8,236,000	

- \* Totals include waste-to-energy plants and two plants using waste wood and tires to produce energy. Totals do not include three small plants using fossil fuels (natural gas and waste coal).
- \*\*Estimates reflect state or regional energy use in the areas in which Wheelabrator operates.
- <sup>3</sup> Waste-to-energy is designated as "renewable" by the 2006 Energy Policy Act, U.S. Department of Energy, and 23 state governments.
- <sup>4</sup> U.S. EPA, Letter to Integrated Waste Services Association (Feb. 14, 2003), http://www.wte.org/docs/epaletter.pdf.
- <sup>5</sup> http://www.wte.org/environment/greenhouse\_gas.html.
- 6 Eileen Berenyi, Government Advisory Associates, Inc., "A Compatibility Study: Recycling and Waste-to-Energy Work in Concert" (September 2008), http://www.wte.org/docs/2008\_Berenyi\_compatibility\_study.pdf.

# What is Waste-to-Energy?



Our subsidiary Wheelabrator Technologies uses trash as fuel to generate electrical power through its 16 waste-to-energy plants,\* which have the capacity to process over 21,000 tons of waste per day. These plants have a combined annual generating capacity of over 609 megawatts of electricity — enough clean, renewable energy to power almost 650,000 homes while potentially saving more than 6 million barrels of oil. Waste-to-energy plants can also provide steam to municipal district heating systems or nearby industrial facilities. Converting trash to energy reduces the volume of the waste by 90 percent, saving valuable space in landfills while providing a viable and economical alternative to the use of fossil fuels.

A leading waste-to-energy provider, Wheelabrator pioneered the commercial waste-to-energy industry more than 30 years ago. Since then, the company has processed more than 150 million tons of municipal solid waste into energy, saving the equivalent of more than 150 million barrels of oil while generating 78 billion kilowatt hours of clean, renewable electricity.

The waste-to-energy process used by Wheelabrator is one of the cleanest forms of electricity generation. In fact, the U.S. EPA has stated that waste-to-energy plants produce electricity "with less environmental impact than almost any other source of electricity." Studies conducted in conjunction with the U.S. EPA have demonstrated that waste-to-energy plants prevent the release of millions of tons of greenhouse gases.

<sup>\*</sup> Wheelabrator also generates renewable electricity from two waste wood and tire plants.



Landfill-gas-to-energy (LFGTE). Waste Management pioneered landfill-gas-to-energy technology 20 years ago and has continued to innovate and improve the process for reliability and efficiency. As the nation's largest owner and operator of landfills, we are in a unique position to expand the domestic energy supply through landfill-gasto-energy technology. Our landfills represent around 15 percent of landfills operating in the United States.<sup>7</sup> The energy that can be produced at these facilities is especially valuable to utilities because it is a consistent, cost-effective and reliable source of energy that can be used for base load power.

By 2012, we plan to develop 60 new LFGTE facilities generating an additional 230 megawatts per year. Together with our more than 100 existing LFGTE projects, Waste Management by 2012 expects to generate enough energy to power 570,000 homes. To place this in context, shown below is the amount of coal and oil that would be needed to provide the energy equivalent of our LFGTE facilities.

By the end of 2012, we plan to have LFGTE facilities at all WM landfills that can support them, and we are investigating ways to use the landfill gas at landfills where gas volume does not support a conventional energy generation facility. Landfill-gas-to-energy is an important source of organic growth, and Waste Management plans to invest up to \$400 million in building these facilities from 2008 to 2010.

In addition, we intend to provide to local governments and the solid waste industry private sector technical consulting services to manage LFGTE projects at their landfills. The U.S. EPA estimates that there are more than 535 landfills across the U.S. suitable to host LFGTE projects but not yet using that fuel. These projects potentially could generate over 1200 megawatts of renewable energy.8

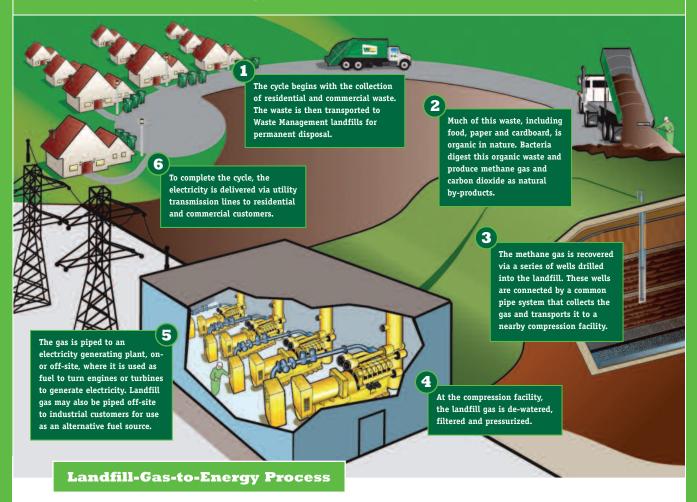
Resource Savings Potentially Achieved Through Waste Management LFGTE Plants					
Year	Gross MWH/Year	Energy equivalent in homes powered*	Energy equivalent in tons of coal potentially offset	Energy equivalent in barrels of oil importation potentially avoided	
2007	3,600,000	389,000	1,910,000	6,300,000	

<sup>\*</sup> Estimates based upon a national average energy use; not a calculation based upon local use data. Conversion factors are those used by the U.S. Department of Energy, Energy Information Administration

<sup>&</sup>lt;sup>7</sup> http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw07-rpt.pdf.

<sup>8</sup> http://www.epa.gov/lmop/docs/map.pdf.

# What is Landfill-Gas-to-Energy?



Landfills offer a clean, renewable energy resource that is generated continuously as waste decomposes in landfills. This resource is known as landfill gas or methane.

Like wind and solar power, landfill gas is a resource that can be harnessed to produce green energy and has many benefits and advantages compared to fossil fuels and alternative energy sources. From current projects, we supply enough gas to create power for nearly 400,000 homes (the equivalent of almost 2 million tons of coal or 6.3 million barrels of oil) and avoid production of the greenhouse gas and other emissions that would be generated from those alternative sources.

#### Landfill-Gas-to-Energy Benefits

- The use of landfill gas as fuel reduces greenhouse gas emissions.
- The energy output is constant and not dependent on sun, wind or other environmental variables.
- The use of landfill gas provides a predictable, renewable energy source during hours of peak energy demand.
- Fuel prices are stable.

#### 2. Recycling \_

# **Waste Management Recycling** Tons of recyclables handled 8 million 2007 Actual 2020 Goal 20 million

Today we manage nearly 8 million tons of recyclables per year; by the year 2020, we expect to nearly triple the amount of recyclable materials we manage.

Our WM Recycle America subsidiary is the largest recycler of residentially generated recyclables in North America. WM Recycle America operates 105 recycling facilities serving municipal, manufacturing, commercial and residential customers.

Our plan to nearly triple the recyclables we manage relies in part on the volumes we can derive from a logistically efficient national array of single-stream recycling facilities. The convenience of single-stream recycling is so effective in increasing participation that we see average increases in recovery of recyclables of 30 percent. In some circumstances, we have seen increases much higher. For example, in Murphy, Texas, a small community outside of Dallas, switching to single-stream increased the recyclables collected by nearly 300 percent.

When single-stream recycling began, some paper manufacturers worried that commodity quality would suffer from commingling. That has changed. Our customers have established strict standards for acceptance, and we have had no problem meeting those



#### **Waste Management helps** transform waste to recycled product by:

- Collecting recyclables from households and businesses
- Using our worldwide network to match generators of recyclables with users of their product
- Processing recyclables for use by manufacturers

standards. In fact, our residual/rejection rates for singlestream recycling are much better than those for traditional materials recovery facilities (MRFs). Our single-stream plants overall have rejection rates 33 percent lower than our facilities using other methods. And the technology is steadily improving. Our single-stream plants using the newest technology (those beginning service in 2006 and 2007) had rejection rates half that of facilities operating with 2002 and 2003 technology.

Growth has been rapid in recycling productivity. From 2002 to 2005, we more than doubled the amount of material processed in our single-stream facilities. In the five years beginning in 2008, we plan to invest in new plant technology that will increase the volume processed in our single-stream plants from 722,000 tons in 2002 to approximately 3 million tons in 2012. By strategically placing these facilities in new markets, we can lower costs and emissions by reducing transportation while capturing new volume that might otherwise be discarded.

The following tables summarize Waste Management's recycling throughputs since the date of our last corporate responsibility report.9 Note that recyclable "tonnage" will vary year-to-year as the company acquires or divests capacity, and local government standards evolve (e.g., paper to be recycled expands from newsprint and office paper to include mixed paper).

	Resource Savings Achieved Through WM Recycling					
Year	Tonnage	Material	Energy Equivalent (in homes powered)*	<b>Greenhouse Gases Reduced</b> (passenger car equivalents)**		
2007	7.6 million	Total recyclables managed. Includes:  • 4.6 million tons processed  • 3.0 million tons brokered	1,336,000	4,750,000		
2006	5.6 million	Total recyclables processed by WM	958,000	3,100,000		

Energy equivalents were calculated using the National Recycling Coalition Environmental Calculator, www.nrc.recycle.org and www.oneearthrecycle.com. Note that in 2006 and 2007 WMRA divested some facilities and did not include materials for which it served as a broker to the recycling processor in its reporting. \*\* GHG reductions in passenger car equivalents using National Recycling Coalition Environmental Calculator, www.nrc.recycle.org.

	Trees Saved through WM Paper Recycling				
Year	Tonnage	Material	Trees Saved*		
2007	6.4 million	Newspaper, cardboard, mixed paper, office paper. Includes:  • 3.5 million tons processed  • 2.9 million tons brokered	86,400,000		
2006	4.1 million	Newspaper and cardboard	47,050,000		

<sup>\*</sup> Energy equivalents were calculated using the National Recycling Coalition Environmental Calculator, http://www.nrc.recycle.org and http://www.oneearthrecycle.com.

We also plan to continue investing in new technologies and partnerships to recycle commodities we have not recycled before.

#### WM LampTracker®/Think Green from Home<sup>SM</sup>

To safely store and recycle used fluorescent lamps and batteries, we have developed two product lines, WM <u>LampTracker</u>® for commercial customers and Think Green From Home<sup>SM</sup> for residential customers. With our fluorescent lamp recycling products, we offer Mercury VaporLok™ technology to help avoid the risk of exposure from breakage during storage and shipping, allowing customers direct-mail recycling capacity.

#### **Electronics recycling**

We have teamed with Sony to establish the first national electronics-recycling program. With Sony, we plan to supply e-waste drop-off sites within 20 miles of 95 percent of the U.S. population. In the first year of operation, this program collected 12 million pounds of electronic waste. A second partnership with LG Electronics, announced in August 2008, initiated e-recycling of LG products.

#### LEED certification services

We see the potential for more construction and demolition waste recycling, driven by the increased desire by developers to have buildings certified under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program.







#### 3. Fleet efficiency and technological innovation

Over the next decade, Waste Management will spend on average \$450 million per year in capital on our fleet and heavy equipment. We expect to direct this capital spending on equipment to help to increase by 2010 the fuel efficiency of our fleet by 15 percent and reduce our fleet emissions by 15 percent. 10 A 15 percent reduction in the fuel used by our trucks would total about 350 million gallons of fuel saved and a reduction of about 3.5 million metric tons of carbon dioxide emissions.

Some of these savings and efficiencies will come from currently available technology; others are now in the development stage.

# **Projected Fleet Efficiency Goals 2007-2020**

Year	Capital spending	Fuel efficiency increase	Fleet emissions reduced	Cost savings
2020	\$4 billion to \$5 billion	15% aggregate	15% aggregate	\$1 billion

We cannot drive this change alone, but we are doing what we can to make this happen. This includes supporting increasing fuel efficiency for heavy duty trucks like ours. Through our participation in Securing America's Future Energy, a non-partisan organization that seeks to reduce America's dependency on oil, we supported provisions that became law in the Energy Independence and Security Act of 2007. This legislation will require a study of ways to increase the efficiency of work trucks and promulgate regulations that will increase their fuel efficiency. We also supported provisions in the Senate's Climate Change bill of 2008 that would have provided rebates to purchasers of heavy-duty hybrid trucks that use less fuel than conventional trucks.

#### 4. Wildlife Habitat and Conservation



Waste Management has a history of using property at its landfills for community amenities — environmental education centers, golf courses, and recreational facilities. We also have joined with the Wildlife Habitat Council (WHC) to formally certify conservation centers at appropriate operating and closed landfills.

By 2020, we plan to increase to 100 the number of Waste Management facilities certified by WHC, and increase the number of our acres set aside for conservation and wildlife habitat to approximately 25,000. As of 2007, Waste Management landfills provide more than 17,000 acres of protected land for wetlands and wildlife habitat managed in partnership with our communities, conservationists, universities and environmental groups to assure longevity of the habitat, consistency with preservation of native species, and preservation of endangered or rare species. One year after announcing our goal in October 2007, the number of Waste Management locations with "Wildlife at Work" certification from WHC had already increased from 24 to 33.

Waste Management also works with local authorities to design and maintain conservation and recreational projects needed in communities near our closed landfills and near remedial sites owned by others where Waste Management has joined with other responsible parties to clean up and restore the property to productive use.

Fleet Efficiency Research				
Reconfigured assets	Advanced technologies	Alternate fuels	Waste stream reduction	
Decoupled cab and equipment	Hydraulic hybrids [currently in Texas in testing]	LNG/CNG	Efficient, cradle-to-grave purchasing agreements	
Electronically driven hydraulics	Electric hybrid trucks [currently in California for cart delivery] Electric hybrid heavy equipment Automated manual transmissions Advanced hydraulic technology Idle-off technology	Cellulose biofuels	Extended drain interval (oils/filtration additives)	

Waste Management	Sites Certified by the	Wildlife Habitat Council by	October 2008
Facility	Location	Facility	Location
Alliance Landfill*	Taylor, PA	Mountain View Reclamation Landfill	Green Castle, PA
Altamont Landfill &	Livermore, CA	Okeechobee Landfill	Okeechobee, FL
Resource Recovery Facility	Liveriliore, CA	Ottawa Landfill	Carp, Ontario, Canada
American Landfill	Waynesburg, OH	Petrolia Landfill	Petrolia, Ontario, Canada
Austin Community Landfill	Austin, TX	Pine Grove Landfill	Pine Grove, PA
Blackwell Landfill	Sarnia, Ontario, Canada	Richmond Landfill	Nappanee, Ontario, Canada
Chaffee Landfill	Chaffee, NY	Riverbend Landfill	McMinnville, OR
Crossroads Landfill	Norridgewock, ME	Saint-Nicéphore Landfill	Saint-Nicéphore, Quebec, Canada
CWM Chemical Services, LLC	Model City, NY	Sainte-Sophie Landfill	Sainte-Sophie, Quebec, Canada
El Sobrante Landfill	Corona, CA	Simi Valley Landfill and Recycling Center	Simi Valley, CA
Geneva Landfill	Geneva, OH	Springhill Regional Landfill*	Campbellton, FL
Grand Central Sanitary Landfill	Argyl, PA	Spruce Ridge Landfill	Glencoe, MN
GROWS and Tullytown Facilities*	Tullytown, PA	Turnkey Recycling and Environmental	Rochester, NH
High Acres Landfill and Recycling Center	Fairport, NY	Enterprises (TREE)	nochester, INFI
Hillsboro Landfill	Hillsboro, OR	Twin Bridges	Danville, IN
Kirby Canyon Recycling & Disposal	Morgan Hill, CA	Warwick Landfill	Watford, Ontario, Canada
Magog Landfill	Magog, Quebec, Canada	Waterford Recreation Association	
Mill Seat Landfill	Bergen, NY	Sports Complex - Morrisville	Morrisville, PA

<sup>\*</sup> Certified as Corporate Lands for Learning (CLL). CLL programs provide children and adults education in the interdependence of ecology, economics, social structures and political process in both urban and rural areas. CLL provides certified Wildlife at Work sites with third-party recognition for educational programs.

A	Additional Conservation Projects at Closed and Remedial Sites by 2007					
Site	Location	Project	Site	Location	Project	
Adams Center	Ft. Wayne, IN	Wildlife and wetlands preservation	Independent Landfill	Muskegon Heights, MI	Wetlands restoration	
Bakersfield	Bakersfield, CA	Kit fox preserve	KinBuc	Edison, NJ	Wetlands restoration	
Hoot	Texarkana, AR	Sulfur River Water Fowl preservation project	SV Farming	Salem, NJ	Endangered species preservation and wetlands restoration	

# Other Key Goals \_\_\_\_\_

Waste Management has set additional key goals focused on safety — safety for our employees, for the communities in which we operate, and for the environment at large. These goals and our progress in meeting them are reported in the sections that follow.

Key Goals				
Focus area	Goal	Progress in 2007		
Worker safety	Mission to Zero worker injuries	<b>71 percent reduction</b> in the number of on-the-job accidents since 2000		
Groundwater protection	Protect the groundwater neighboring WM properties	As of 2007, <b>no WM modern</b> landfill* has ever needed to take remedial action to clean up groundwater on neighboring property		
Climate change	As a founding member of the Chicago Climate Exchange, meet goal of reducing CO <sub>2</sub> emissions by 6 percent from our 1998-2001 baselines by 2010	Certified in compliance each year since inception of the program		
* See page 24 for discussion.				

<sup>&</sup>lt;sup>11</sup> http://www.wildlifehc.org/corporatelands/index.cfm.



## A foundation of environmental and worker protection

Great operations don't come about by accident. They require platforms of excellence for economic, environmental, safety and workforce management. Waste Management measures results — and it also establishes tested systems to improve environmental, safety and workplace performance.

# Managing for progress

#### Sound governance

Waste Management's governance is premised on strategic planning, cross-functional teamwork, and change informed by benchmarking and pilot testing.

Board leadership. All members of Waste Management's Board except for David Steiner, CEO, are independent, as is the Board's Chair. At the Board of Directors level, the Audit Committee is responsible for overseeing environmental, safety and health compliance. This committee is made up entirely of independent directors. Their efforts are supported by the Compliance Audit Services department overseeing compliance audits at all companyowned, -operated or -controlled facilities or operations. This department operates independently of the groups and market areas it audits, and provides summaries of its findings and trends directly to the Board of Directors' Audit Committee. 12

Strategic planning. Under our corporate governance guidelines, the Board of Directors performs annual strategic planning in coordination with the **Senior Leadership Team** (SLT), which includes the leaders of each Waste Management geographic division, Waste Management Recycle America, Wheelabrator Technologies and core corporate functions.

The SLT's recommendations follow an annual strategic planning process, including five-year forecasting and evaluation of futuristic operational scenarios tracking domestic and global economic, regulatory, legal, and customer-focused trends.

Cross-functional leadership teams. The strategic planning process is further shaped by focused Performance Leadership Teams (PLTs) charged with benchmarking customers and experts, and establishing deliberative work plans for key operational initiatives. The 2007 PLTs focused on key issues of sustainable operations.

#### **SLT Membership**

- Chief Executive Officer
- President and Chief Operating Officer
- Chief Financial Officer
- Chief Information Officer
- General Counsel and **Chief Compliance Officer**
- Senior Vice Presidents for People, Sales & Marketing, and Government **Affairs & Communications**
- Senior Vice Presidents for Eastern. Midwest, Western, and Southern Groups
- President, WM Recycle America
- President, Wheelabrator Technologies
- Vice President, Finance & Treasurer
- Vice President, Business Ethics & Chief Diversity Officer

2007 Performance Leadership Teams			
Key Initiative	Goals		
Sustainable growth	Realize optimal resource value from wastes managed Find efficiencies in materials movement Create templates to reduce waste and emissions throughout operations Develop comprehensive sustainable service offerings for the municipal market		
Carbon footprint	Develop an accurate, enterprise- wide carbon footprint		
Landfill gas maintenance and efficiency	Expand gas management training and performance criteria     Establish company-wide critical design and operating standards     Develop a renewable energy project best-management process     Increase landfill gas collection efficiency to increase renewable energy production and lower emissions		

<sup>12</sup> http://www.wm.com/wm/about/governance.asp

# Continuous environmental improvement

#### What we spend to protect the environment.

Sustainability reports typically disclose environmental protection expenditures in terms of staff time devoted to regulatory compliance, costs of pollution control devices and projects, and research on reduction of the use of toxics. As a leading infrastructure provider for environmentally progressive waste handling and energy production, Waste Management's "environmental expenditures" are different. They properly include the compliance, environmental protection, control and research costs reported by the typical manufacturer, but also include 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.

#### **Environmental Management and Protection.**

Waste Management has developed an enterprise-wide Environmental Management System (EMS) tailored to support full environmental compliance at our facilities. Corporate goals and objectives for this system are developed based on systematic review of ongoing operational performance and evaluation of conditions that could result in potential environmental exposure if not proactively managed. As part of the company's culture of continuous improvement, these tools, training and strategies are reviewed and updated annually. The corporate EMS consists of these key elements:

#### **Environmental Self-Assessment (ESA) Program.**

District and site management for WM collections, transfer, landfill, recycling, waste-based energy and closed sites (totaling over 1200 locations) complete an ESA module each month (12 modules a year) on specified environmental topics. Each module consists of a series of questions identifying key issues and tasks to be performed to assure environmental concerns are identified and resolved before they could rise to the level of non-compliance. The modules cover the tasks tracked through our enterprise-wide, online environmental metric system, the E<sup>3</sup> Scorecard, described on the next page. Modules are task-specific and centrally accessible online.

Total Environmental Expenditures						
Yea	ır	Environmental costs* (in millions)	Total annual expenses (in millions)	Percentage of environmental cost to total expense		
200	)7	\$4,279	\$11,056	39%		
200	)6	\$4,468	\$11,334	39%		

\* Includes costs associated with the environmentally responsible disposition of waste and creation of renewable fuel. Excluded are costs associated with sales, collection operational costs, administrative costs, merger costs and unusual items.

#### Waste Management has six departments specializing in environmental management:

- Environmental Protection provides environmental policies, procedures and guidance designed to assure 100 percent compliance and provide standardized operational practices\*, compliance tools, mandatory monthly training, environmental metrics and strategic compliance advice to the groups and market areas
- Groundwater Protection provides expertise and direction on groundwater protection programs, and ensures environmental monitoring networks are installed and operating to specifications
- Environmental Engineering manages the planning, design and operation of our disposal facilities
- Air/Gas Management develops policies and standards as well as the planning and development of air quality and gas management tools
- Laboratory Services Program assures accuracy and quality control in the analytical testing of environmental monitoring samples
- Environmental Information Services deploys systems for training, self-assessment, compliance assurance, corrective measure tracking and environmental metrics
- \* Listed at http://www.wm.com/wm/environmental/protection.asp

#### **Compliance Management and Assurance.**

The corporate Environmental Protection department monitors compliance, including proactively preventing, tracking and correcting conditions before they can become a regulatory violation. The goal of the department is 100 percent compliance and enhancement of the environment, with tracking of annual performance through the E<sup>3</sup> Scorecard. The Scorecard goes beyond tracking regulatory compliance to monitor conditions that, if uncorrected, could lead to a regulatory violation. E<sup>3</sup> Scorecard results are communicated monthly to site managers and the Senior Leadership Team.

#### **Environmental Performance 2004-2007**

E<sup>3</sup> Scorecard scores

Improved more than 35%

Incomplete compliance module tasks (tasks addressing conditions before they can become compliance violations)

Reduced more than 90%

International Organization for Standardization (ISO) certified facilities. Waste Management's Upstream Division achieved its ISO 14001 registration in November 2004, marking it as one of the very few non-facility-based service organizations with an EMS conforming to the ISO standard covering all of their services. In addition to Upstream, ISO certification has been obtained for:

- Individual landfills Alliance Landfill was the first of four Waste Management landfills to receive ISO certification.13
- WM's nationwide e-cycling division is the first national electronics recycler to achieve ISO 9001 and 14001 certifications.14

**Environmental training.** Waste Management recognizes that in order to achieve environmental performance goals, employees must possess the knowledge and skills to 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 that outlines Waste Management's standards for environmental practices. Employees responsible for environmental leadership are trained in the company's environmental practices through a series of online modules. Additional local training is provided through:

- · Group in-house classroom training
- On-the-job training
- Online training

#### **Compliance management tools** employed across WM include:

- E3 Scorecard environmental metric, deployed at all facilities across Waste Management and linked to management compensation, which tracks environmental performance and consists of:
- CYCLE (compliance assurance task-based tracking software)
- Environmental Self-Assessment issue correction and prevention
- Agency-identified violations
- Corporate audit findings and correction
- Environmental impact response and correction.
- Dakota Tracer centrally manages and tracks all identified environmental issues
- Incident Alert Notification System gives immediate notification of significant environmental events
- Latent Cause Analysis process to identify underlying root causes of non-compliance to prevent recurrence
- WMVisor (WM's intranet), WM Monday (Waste Management's weekly newspaper), and Managers First (WM President's newsletter to managers) - updates to employees on environmental and operations best practices

Formal company-wide environmental training also consists of the monthly Environmental Learning Series and the Environmental Compliance Awareness Program (ECAP). The Learning Series is a systemwide, online program targeting site management with a different environmental topic each month. Comprehension is verified through tracked testing and minimum standards for passing each module. The ECAP training is conducted live and targets front-line employees — from drivers, to mechanics, to maintenance and gatehouse personnel — with a different environmental topic each month. Attendance is tracked and audited by the corporate audit program. Monthly environmental topics of these training programs are harmonized with the Environmental Self-Assessment program to assure that each subject reaches a wide cross-section of the company.

Compliance auditing. Environmental staff's drive to achieve 100 percent compliance is supplemented by an independent Compliance Audit Services department. This department of Certified Professional Environmental Auditors employs approved American Standards for Testing and Materials (ASTM 2000) practices for environmental regulatory compliance audits. It provides systematic independent review of operations to assure compliance with all applicable requirements. The Compliance Audit department, under the oversight of the Vice President and Assistant General Counsel, reports its results directly to the Audit Committee of the Waste Management Board of Directors on environmental, safety and health compliance matters. Audit tracking and response is managed with an in-house, Web-based program providing biweekly reporting and oversight until needed corrective action has been completed and verified by the audit team. Compliance statistics from the program are reviewed monthly and reported quarterly to the Board of Directors.

#### Procurement for sustainable operations.

The central Procurement Department continuously screens contracts for opportunities to use recycled materials, reduce fleet fuel and oil consumption, reduce emissions, and increase fleet efficiency.

 3001 Procurement Department Reviews
Re-refined used motor oil, recycled
and the area of the area from the area.

Recycling	antifreeze, closed loop brake drums, increased recycled content for office supplies and carts	
Oil use reduction	Advanced filter technology, synthetic lubricants	
Weight reduction	High pressure cylinders for bodies, disc brakes, alternate materials	
	Alternate tire designs, alternatives	

Fuel consumption reduction

Fuel consumption reduction

Fuel consumption reduction

Fuel consumption reduction for running body hydraulics, hybrid electric trucks and heavy equipment, hydraulic hybrid trucks, electric hybrid heavy equipment, synthetic lubricants

#### Fleet efficiency management.

Waste Management continuously looks at how our fleet of garbage collection and recycling trucks can produce fewer emissions and operate more efficiently. In 2007, we programmed the engines of all our new trucks to shut down automatically after idling for five minutes. For 2008, the same modification is scheduled for all trucks built between 1997 and 2006. Through fleet management and route optimization, Waste Management was able to improve efficiency, reduce miles traveled and reduce driver time by more than 2 million hours in 2007.



#### Environmental education. \_

Waste Management believes its obligation to educate and train on environmental issues goes beyond the professional environmental staff to include all employees — and the public at large.

#### **Environmental Education Efforts**

WMM Monday
Managers First
CEO Update

Think Green.com
http://www.thinkgreen.com

WM.com Corporate Web site includes technical http://www.wm.com/wm/ papers on the design and operation of environmental/resources.asp environmental service facilities

points of view on current issues

Greenopolis.com
http://greenopolis.com
An online community of people with the Spirit of Greener Living™. Created and sponsored by Waste Management

#### **Continuous improvement in safety**

Mission to Zero<sup>™</sup>. Mission to Zero<sup>™</sup>, or M2Z<sup>™</sup>, was initiated in 2001. It means zero tolerance for unsafe actions, decisions, conditions, equipment and attitudes; and has a goal of zero accidents or injuries. M2Z<sup>TM</sup> seeks to change behaviors and develop company leaders who can train and lead others. The M2Z<sup>™</sup> program components include a driver/operator rule book, an automated behavior observation system, and local operations' location-specific safety action plans.

One of Waste Management's highest priorities for the solid waste industry overall has been to instill an effective culture of safety. The industry results have been impressive. WM has led its trade association, the National Solid Wastes Management Association, in an industrywide effort to continuously improve safety and to educate the general public on how they can help assure the safety of sanitation workers doing what's necessary to keep communities clean.

#### Collaboration with OSHA for worker safety.

In March 2007, our Wheelabrator Technologies subsidiary achieved its goal of having all 21 of its energy plants certified as Star sites by the Occupational Safety and Health Administration (OSHA). Star-certified status is the highest recognition given by OSHA through its Voluntary Protection Program (VPP), awarded to facilities with outstanding health and safety systems and processes. This honor is shared by less than 0.03 percent of the nation's worksites, and only nine other U.S. companies have more worksites certified as VPP Star locations.

In August 2007, Waste Management's Carlsbad, California, facility became the first waste and recycling service hauling company in the nation to achieve VPP Star designation. In November 2008, the Waste Management Recycle America Lake County facility was recognized with VPP Merit certification.

OSHA has invited us to participate in its Voluntary Protection Program Corporate Pilot. This invitation-only program is designed to test new processes for corporate applicants who have demonstrated a strong commitment to employee safety and health. To date, only six other companies have achieved VPP Corporate Pilot certification.

#### **Statistics Show Solid Waste Fatalities** Down 50 Percent In 2007

New York, NY - New statistics from the federal government show that on-the-job fatalities for solid waste collection workers fell by more than 50 percent in 2007 compared to the previous year. The federal Bureau of Labor Statistics reports there were 18 fatalities among refuse and recyclable material collectors last year, down from 37 in 2006. "The BLS report reflects the hard work of senior management, safety managers and others at solid waste companies, who have been focusing on improving the safety performance of their employees," said Bruce Parker, CEO of the National Solid Wastes Management Association.

– Waste News, August 22, 2008

#### Everyday security and disaster recovery.

Waste Management's Corporate Security department protects company employees and assets 365 days a year. It also provides services to allow our employees to respond quickly and safely in the event of natural disaster and other emergencies that would otherwise interrupt essential sanitary and environmental services. The department has received the only Customs-Trade Partnership Against Terrorism (C-TPAT) certification from the Department of Homeland Security for materials transport between the U.S. and Canada. WM Security Services recently received Five Diamond Certification by the Central Station Alarm Association, the nation's preeminent alarm monitoring industry association. This certification recognizes companies demonstrating an exceptionally high degree of responsibility to their local community and their customers through the investment of time, money and commitment to top-level operator training. There are approximately 2,700 central security stations in the United States; fewer than 100 central stations have achieved Five Diamond Certified status.





#### An engaged workforce

One of Waste Management's strategic business goals is to be a best place to work.

Interactive leadership. The leaders at Waste Management, including the chief executive officer and the chief operating officer, operate with an open door — and open e-mail inbox — policy. Knowing that managers can only address the issues they know about, the company encourages free communication between leaders and employees at all levels. Every quarter, Waste Management's senior leadership team hosts a Town Hall meeting at the Houston headquarters. Employees unable to attend are invited to submit questions by e-mail. Direct responses are given to employees submitting questions, and often responses are included in the company's weekly newspaper, WM Monday. The company also offers "Trash Talk" meetings conducted by the chief operating officer and group senior vice presidents as they travel to local Waste Management sites. In this smaller audience setting, field employees have their questions or concerns addressed directly by senior management, and senior management gains the benefit of line employees' ideas

**Exchanging ideas.** Employee input is encouraged through the WMIdea Xchange program.

and recommendations.

Employees whose ideas are adopted as best practices receive a \$100 gift certificate. Annually the employee (or members of a team) submitting the most effective idea receives a prize of \$5,000.

#### Through WMIdea Xchange, **Waste Management welcomes** employee suggestions on:

- Reducing operating costs
- Improving profitability
- Creating a feeling of employee empowerment
- Improving job satisfaction
- Fostering a positive work environment
- Enhancing internal communication



#### Breakthrough Performance Leadership.

In mid-2007, we launched a performance leadership program to increase communication at every level in the company. We want to create a best place to work where every employee feels valued, engaged, and empowered to improve the company. The program was designed to improve recruitment, training, and retention of employees, as well as to encourage the development of effective managers and leaders who can communicate and create a team atmosphere with front-line employees. It was patterned after a 2006 program the company developed in Florida to strengthen driver recruitment and retention that led to dramatic improvements in safety performance, employee morale and customer service.

To measure the effectiveness of the program, we collaborated with the Gallup Organization.<sup>15</sup> By January 2008, the market areas where the Breakthrough Performance Leadership (BPL) program was first launched had shown the following improvements:

#### **BPL Performance in Pilot Market Areas**

Incr	ease in measured employee engagement	55%
	ease in safety (measured by decrease otal Recordable Incident Rate)	11%

The potential for this initiative to supplement managers' drive for continuous improvement throughout the company is dramatic. In one market area implementing BPL from 2006 to 2008 we saw:

BPL Results in One Market Ar	ea
Increase in operating profit	30.0%
Increase in safety (measured by decrease in TRIR)	83.0%
Fleet performance improvement (measured in cost per hour)	15.2%
Decrease in voluntary employee turnover	83.0%

#### **Integrity Helpline**

This multilingual, confidential and/or anonymous toll-free service is available to all Waste Management employees 24 hours a day, 365 days a year.

# Operational achievement: Our results

The goal of our management systems is to continually improve performance in protecting the environment, providing safe working conditions, and turning waste into valuable resources. Success is measured in tangible results in these key areas.

#### **Environmental compliance**

Our goal for environmental compliance is simple: zero deviations from regulatory standards and sound environmental practice. As noted on pages 18 and 19, our Environmental Management System is designed to avoid non-compliance through prevention, training, selfidentification of issues, rapid correction of such issues, and tracking of resolution. The goal is to correct conditions that could lead to a violation before the violation happens.

We have not yet achieved our goal of zero violations, and we continue to expand our environmental programs to steadily decrease this shortfall. Our performance is improving year over year at the more than 1,200 Waste Management facilities subject to environmental regulations, but we continue to take every departure from the regulations, no matter how small, very seriously.

The following charts our year-over-year performance in environmental Notices of Violation<sup>16</sup> received since 2005.



<sup>&</sup>lt;sup>15</sup> http://gmj.gallup.com//content/24880/Gallup-Study-Engaged-Employees-Inspire-Compnay.aspx

<sup>&</sup>lt;sup>16</sup> Notices of Violation (NOVs) range from a short delay in receipt of a required report, to deviations from any aspect of regulatory standards or permit conditions. Some could have potential to impact the environment, but most do not. Upon investigation, not all NOVs are ultimately found to represent an actionable violation.



Protection of groundwater. Our modern municipal solid waste (MSW) landfills are performing as designed and are protecting the natural resources, including groundwater, at neighboring properties. Modern landfill standards, developed under the Resource Conservation and Recovery Act (RCRA), apply to our landfills across the country and mandate a rigorous siting evaluation and scientific engineering design. RCRA Subtitle D standards require a comprehensive permitting process with public notification and comment, and extensive regulatory approvals. The current RCRA Subtitle D standards defining the "modern landfill," in effect since 1993, have resulted in modern MSW landfills that are highly regulated and protective of the environment through mandatory use of engineered liners and covers, leachate collection and treatment systems, and landfill gas collection and control systems. These systems interact to provide redundant levels of protection as well as continuous monitoring of performance throughout the life of the landfill and after it closes.

Groundwater conditions surrounding our facilities are monitored on a routine basis by more than 6,000 permitted groundwater monitoring wells to ensure protection of the environment. Of Waste Management's modern landfills, zero have had to undertake corrective action to clean up groundwater under a neighboring property. Fifteen years of experience with the federal requirements have proven the effectiveness of the national RCRA baseline standard in protecting human health and the environment.

We also have been working with experts in the public and private solid waste sector to understand what happens to landfills over time. The resulting studies document that conditions at MSW landfills improve in predictable patterns over time, with landfills steadily producing less gas as well as less and cleaner leachate. This research is important in establishing the safety of modern landfills long after they close, and it demonstrates that landfill property can be converted safely to a wide range of recreational, conservation, commercial and industrial uses.17

#### **Corrective Actions Required for Modern Waste Management Landfills Impacting\* Groundwater on Neighboring Properties**

	Goal	2006	2007		
	0	0	0		

<sup>\*</sup> As groundwater impacts are defined under the applicable federal standards, RCRA Subtitle D Parts 257 and 258 Appendix I. Corrective actions are physical activities undertaken to remedy the migration of contaminants affecting groundwater on neighboring property.

Performance of Waste Management's hazardous waste facilities. Waste Management owns seven hazardous waste treatment and disposal facilities subject to the U.S. EPA's Toxics Release Inventory (TRI), a public data repository compiled to inform the public about the presence of chemicals in their communities. TRI compiles information on what are termed "releases" of over 650 chemicals. These releases take two very different forms:

- Actual releases: releases of chemicals into the ambient environment, as specifically authorized by permit or regulation, from designated industrial sources.
- Containment: disposal of chemicals at hazardous waste landfills and underground injection wells, as specifically authorized by permit. This requires permanent isolation in an engineered disposal unit.

To place these reports in context, in 2006, 22,880 U.S. facilities submitted TRI reports documenting 4.25 billion pounds of emissions.

Actual Releases at Waste Management Hazardous Waste Facilities. TRI-reportable releases are strongly correlated to increased industrial productivity and to the means by which chemicals are handled. These releases must be within emission levels authorized by permit or regulation, but the TRI was initiated to go beyond the permitting process to provide communities with information about chemicals from all of the facilities in their vicinity. Disclosure of the total releases emitted in each community was intended as an indirect means of encouraging pollution prevention, and in fact has served that purpose. The following information reflects reductions in actual releases from Waste Management facilities from the date TRI became applicable to hazardous waste facilities to 2006, the year of the U.S. EPA's most recent data compilation. Note that these releases are all within authorized permit limits.

Reductions in TRI Chemical Releases at Waste Management Hazardous Waste Facilities (in pounds)								
Release	2000	2001	2002	2003	2004	2005	2006	Reduction in 2006 from highest year release
Air	17,237	32,605	15,112	10,163	9,257	9,984	8,436	74%
Surface water	2,844	195	186	114	169	27	4	99%

Containment at Waste Management's Hazardous Waste Facilities. Containment of a TRI chemical in a permitted RCRA hazardous waste facility is the opposite of release. The purpose and design of the federally mandated RCRA program is to assure that materials placed in a RCRA containment facility will never migrate into the environment at all. As a consequence, in the U.S. EPA's view, increases in containment of TRI materials can represent "a generally positive environmental trend because these facilities are in the business of managing hazardous waste and do so under strict controls." <sup>18</sup> The U.S. EPA reports the following containment for the seven Waste Management hazardous waste facilities:

Containment (in pounds)							
Waste Management's Land and Underground Injection Facilities							
2000	2001	2002	2003	2004	2005	2006	
161,681,201	69,093,763	49,849,547	73,918,199	61,994,121	37,288,901	37,526,001	
Transfer to Land and Underground Injection Facilities Off-Site							
2000	2001	2002	2003	2004	2005	2006	
538,098	458,951	530,510	596,280	577,753	583,511	75,696	
U.S. EPA, Envirofacts, http://www.epa.gov/enviro/html/tris/tris_query.html.							

The declining trend in containment at Waste Management facilities reflects, in part, declining activity in remediation projects and brownfields cleanup, as well as a flattening of activity in some heavy industrial sectors. It also reflects positive initiatives to avoid generating hazardous waste in the first place — initiatives for which Waste Management Upstream is a leading service provider. The off-site transfers for containment vary, reflecting changes in customer base from year to year, one-time events like plant closures or large remedial projects, and changes in treatment or disposal regulations.

# **Reporting on Dioxin**

In addition to reporting on total releases of TRI chemicals, TRI requires separate reporting of dioxins because these constituents are a matter of particular public concern. There have been no reportable releases to air or surface water of dioxin or dioxin-like compounds from a Waste Management hazardous waste facility from 2000 through 2006, the applicable reporting years.

Waste-to-energy facilities are not among the sources included in the TRI, but concerns have been expressed about releases of dioxin from these combustion facilities. It is important to understand that combustion from any source — manufacturing processes involving high temperature, natural occurrences like forest fires and volcanic eruptions — can create dioxin compounds.

Dioxin emissions test data from waste-to-energy facilities as currently regulated (Maximum Achievable Control Technology) are at levels barely detectable by the most sophisticated instrumentation. <sup>19</sup> It is for this reason, among others, that the U.S. EPA has characterized waste-to-energy as producing electricity "with less environmental impact than almost any other source." <sup>20</sup>

Comparison of Dioxin Emissions						
Source	Amount	Reference				
Total TRI releases nationally from all sources	130,277grams/ 287 lbs.	U.S. EPA Toxics Release Inventory 2006 Public Data Release Key Findings, http://www.epa.gov/tri/tridata/tri06/pdr/key_findings_v12a.pdf				
Backyard trash burning	550 grams/ 1.2 lbs.	http://www.wte.org/docs/FactSheetDioxin.pdf				
All U.S. waste-to-energy facilities	12 grams/ 0.026 lbs.	"Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p- Dioxin (TCDD) and Related Compounds" (commonly called U.S. EPA's Dioxin Reassessment) http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=87843				

#### Fleet performance.

The corporate fleet department continually seeks standard practices to increase efficiency and reduce emissions. In 2007, effective fleet management and route optimization allowed us to improve efficiency and reduce driver time by more than 2 million hours.



# Among the fleet initiatives Waste Management employed in 2007:

Standardized route optimization planning

5-minute idle shut down time

More than 1,000 after-treatment devices installed

Conversion to ultra low sulfur diesel

Limits on top engine speed

Increased use of biodiesel

Evaluation of propane as fuel

Use of LNG and CNG in nearly 1,000 trucks

<sup>19 &</sup>quot;Waste-to-Energy is an Insignificant Source of Dioxin," Integrated Waste Services Association, http://www.wte.org/environment/dioxin.shtml.

<sup>&</sup>lt;sup>20</sup> U.S. EPA Letter to Integrated Waste Services Association, Feb. 14, 2003, http://www.wte.org/docs/epaletter.pdf.

#### **Safety results**

Waste Management's Mission to Zero™ (M2Z™) initiatives have resulted in dramatic improvements in safety. Since its beginning in 2001, M2Z™ has driven a reduction in injuries and vehicle accidents that has resulted in millions of dollars in cost savings and, most importantly, safer communities.

Waste Management's total incident rate (non-fatal illness and injury) has improved dramatically, with an 83 percent improvement from 2000 through the third quarter of 2008.

Among additional improvements:

Reduction Goal	Results		
Lost-time injuries	Reduced 30% in 2007		
Workplace injuries	Reduced 80% from 2000 to 2007		

Of particular concern to sanitation workers (as well as maintenance employees in all sectors) are injuries from "sharps" — needles and syringes used by people selfinjecting medications in their homes, where they work and where they travel. Each year more than 3 billion sharps are discarded in trash or recycling containers. In partnership with Sharps Compliance, Inc., the market leader in sharps disposal-by-mail containers and products, and Becton-Dickinson, the country's largest manufacturer of medical syringes, Waste Management has implemented **Sharps Disposal** by Mail System®, the first complete mail-back system available to the public offering a safe and economical way for individuals to dispose of used sharps.







#### A workplace for the future

**Ethics and values.** At Waste Management, we believe it is imperative to exhibit the highest ethical standards — as a company and as individuals. Our aim is to be defined by a culture that reflects our core values: honesty, accountability, safety, professionalism, respect, inclusion, diversity and employee engagement. All employees are trained and must comply with the company Code of Conduct.<sup>21</sup>



Waste Management was recently named to Ethisphere magazine's list of the <u>"World's Most Ethical Companies"</u> — the only company listed in the environmental services and equipment category. Our CEO David Steiner was also named one of Ethisphere's <u>"100 Most Influential People in Business Ethics"</u> in 2007.

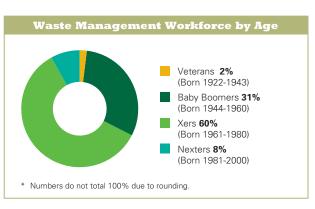
#### Building strength through diversity and inclusion.

Our success in the long run relies upon a vibrant and diverse workforce. Our workforce reflects the diversity of the customers and communities we serve.

Currently, 40 percent of our employees are minorities and 17 percent are women. Nearly 30 percent of our executive leadership team is minority or female; 17 percent of our officers and managers are minority and 15 percent are women. Our board of directors is 25 percent minority and 12.5 percent female.

Supply chain diversity. We seek diversity in the supply chain as well as in our workforce. Developing partnerships with minority, women-owned and service-disabled veteran business enterprises helps build the world-class supplier base we need. Waste Management has a partnership with AECsoft USA, Inc. to ensure that our Supplier Diversity Program continues to improve. We invite all suppliers, including qualified minority, women and service-disabled veteran owned business enterprises, to register online in our Total Supplier Management System (TSMS) database at http://www.wm.com/wm/ethics-diversity/supplier\_diversity.asp.





<sup>&</sup>lt;sup>21</sup> http://www.wm.com/wm/ethics-diversity/code\_of\_conduct.asp.



# How we are addressing climate change

Waste Management recognizes our obligation as an industry leader and environmental steward to identify our company carbon footprint, voluntarily reduce our greenhouse gas (GHG) emissions, and help our customers do the same.

#### Waste Management's operations can emit greenhouse gases from:

- CO<sub>2</sub> emissions from combustion of fossil fuel in our vehicles and at our facilities
- CO<sub>2</sub> emissions from waste combusted at our waste-toenergy plants. These emissions are more than offset by production of renewable electricity
- Indirect GHG emissions from our use of electricity
- Methane emissions from MSW landfills. These emissions are controlled by operation of gas collection and control systems, management of the landfill's cover, flaring of the landfill gas or conversion of the gas into energy.

Greenhouse gas reduction goals. Overall, the waste sector is a very small contributor to total U.S. GHG emissions — less than three percent. Through technological advancements, environmental regulations and emphasis on resource conservation and recovery, the solid waste management sector has decreased GHG emissions from MSW management by more than 75 percent from 1974 to 1997 — despite an almost twofold increase in waste generation.<sup>22</sup> The U.S. EPA's U.S. GHG Inventory notes that since 1990, landfill methane emissions have decreased by more than 16 percent.

#### **Waste Management employs a number** of innovative technologies to reduce greenhouse gas emissions, including:

- Saving resources and energy through the nation's largest recycling program
- Advancing technology for alternative transportation fuels (e.g., landfill gas to liquefied natural gas) and engine design to lower GHG emissions from our vehicles
- The operation of landfill-gas-to-energy, wasteto-energy and biomass plants that produce electricity and fuels to replace fossil fuel use
- The recovery and destruction of methane gas from landfills
- Development of Next Generation Technology® or bioreactor landfills that offer enhanced collection and beneficial use of landfill gas

Waste Management was the first company in the solid waste industry to join with others to methodically reduce GHG emissions. A founding member of the Chicago Climate Exchange (CCX), we meet CCX's membership commitment to decrease greenhouse gas emissions for both Phase I and Phase II of the project.

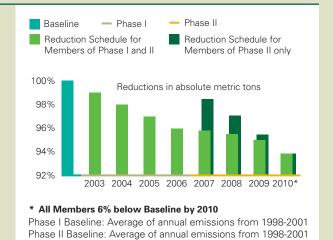
<sup>22</sup> K. Weitz et al., "The Impact of Municipal Solid Waste Management on Greenhouse Gas Emissions in the United States," Journal of Air & Waste Management Association, Volume 52, September 2002.

### **Emission Reduction Commitment**

The Chicago Climate Exchange (CCX) is a cap and trade system whose members make a legally binding emission reduction commitment.

In Phase I, members committed to reduce emissions by a minimum of 1 percent per year, for a total reduction of 4 percent below baseline. In Phase II, CCX members commit to a reduction schedule that requires year 2010 emission reductions of 6 percent below baseline at

http://www.chicagoclimatex.com/content.jsf?id=72



Since 2004 we have reported annually to the CCX our U.S.  $\rm CO_2$  emissions from fuel consumption, as well as waste combustion at our waste-to-energy facilities with rated capacity of 25 megawatts or larger. This includes  $\rm CO_2$  from combustion of fuel in our U.S. operated collection vehicles and stationary facilities, small quantities of supplemental fossil fuel consumed by our waste-to-energy plants, and combustion of non-biogenic materials (waste not produced from a biological process, e.g., plastics or synthetic textiles) contained in the waste burned in our waste-to-energy plants.

CCX members' annual inventories are third-party audited by the Financial Industry Regulatory Authority (FINRA) at the direction of CCX, and then certified.

Enterprise-wide Waste Management greenhouse gas inventory. Our operations are complex and diverse. Only part of our enterprise-wide GHG emissions have been registered for the CCX program. In anticipation of federal and state regulation and in order to understand and disclose our carbon footprint, in December 2007 we initiated a two-year project to develop a company-wide carbon footprint using a multidisciplinary Carbon FootprintTeam. The team is identifying Waste Management sources of GHG, calculating GHG emissions, and — where no methods exist — developing new protocols reflecting state-of-the-art thinking on the most accurate GHG estimation methods. Our goal is to inventory our 2009 GHG emissions to be ready for voluntary or mandatory reporting in 2010.

Our inventory will reflect the most accurate means within our industry to calculate GHG emissions. Waste Management has joined with leaders in government and industry in this effort, working with staff of the multi-state Climate Registry and the U.S. EPA to provide experience and practical advice as the states and the U.S. EPA develop uniform protocols for voluntary and federal mandatory GHG emissions reporting.

or the single year 2000

Initial inventorying in California. We joined the California Climate Action Registry (CCAR) in 2006 to pilot greenhouse gas inventorying by voluntarily measuring and reporting emissions from all of our California operations. Waste Management was the first solid waste company to join CCAR and was recently designated a "Climate Action Leader" by CCAR. As a member of CCAR, we reported our 2006 direct emissions from mobile and stationary source fuel consumption, and indirect CO<sub>2</sub> emissions from electricity use that occurred in the state of California in accordance with CCAR quantification and reporting practices. The 2006 emissions report was third-party verified and accepted by CCAR in May 2008.

We voluntarily reported methane emissions from our California landfills, using the protocol prepared by SCS Engineers on behalf of Waste Management and other waste sector members, which we shared with state regulators and the U.S. EPA. We also voluntarily reported:

 Estimated avoided emissions associated with renewable power production at our California landfillgas-to-energy projects and our biomass plant

- GHG reductions associated with the recycling of municipal solid waste materials processed by Waste Management operations in California
- Estimated annual carbon sequestration in our California landfills

These results are publicly available at http://www.climateregistry.org/ ARROT/public/reports.aspx under "Waste Management."

Carbon Disclosure Project and other technical and policy dialogues. Waste Management is actively studying with stakeholders from all perspectives how greenhouse gases can be accurately inventoried and disclosed, and how that information can be used in climate change initiatives that improve the environment and are consistent with a healthy economy. We participate in the Carbon Disclosure Project (CDP) and have made our report publicly available. We have also commented on federal, regional and state frameworks for addressing climate change. Extensive comments and recommended protocols have been discussed with:

- U.S. House of Representatives, Committee on Energy and Commerce
- U.S. Senate Energy and Natural Resources Committee
- U.S. Environmental Protection Agency
- California Air Resources Board
- Western Climate Initiative
- Regional Greenhouse Gas Initiative (RGGI)
- California Climate Action Registry
- The Climate Registry

All comments are a matter of public record.

Landfill methane emissions quantification and modeling. Most organic matter placed in landfills naturally decomposes to a mixture of mostly methane and carbon dioxide gas; some is permanently sequestered in the landfill.23 Typically, most of the methane is collected and either burned in flares or used for energy production, but some is not collected and can be emitted to the atmosphere. An accurate characterization of the amount emitted is difficult because of landfills' varying sizes. shapes, operational practices, and climatic conditions, and because the effect of landfill cover in containing emissions is insufficiently documented.

To determine more accurately the amount of methane emitted from landfills, we have undertaken a multi-year study using state-of-the-art measurement techniques at landfills with different operational, topographical and

climatic features. As part of the study, we are working with the U.S. EPA to develop the use of a tunable diode laser (TDL) emissions measurement tool for use at landfills. This study is part of a Cooperative Research and Development Agreement (CRADA) between Waste Management and the U.S. EPA on bioreactor landfills, known as Next Generation Technology®.

Surface methane emissions from the landfill are measured using the TDL system as well as static flux chambers at our landfills across the U.S. In addition, the amount of methane oxidized by soil bacteria present in the soil covering the landfill is quantified using stable isotope techniques. Florida State University will use these data to develop models to predict methane emissions and methane oxidation at landfills, and ultimately to recommend landfill design and operational practices to minimize methane emissions.

#### **Waste Management is collaborating** with a number of public and private partners to improve knowledge of landfill methane emissions.

- Our California landfills are part of a landfill methane study sponsored by the California Energy Commission and led by Dr. Jean Bogner, a noted landfill expert.
- We joined Veolia Environmental Services of North America in 2008 in conducting a field evaluation of innovative approaches to determine fugitive methane emissions in Wisconsin. An international group of researchers from France, Finland, Sweden, the United Kingdom and the U.S. participates in the project, with support from the Environmental Research and Education Foundation and the U.S. EPA's National Risk Management Research Laboratory. The measurement methods evaluated include TDL vertical radial plume mapping, static flux chambers, mobile plume Fourier-transform infrared spectroscopy, micrometeorological eddy-covariance and differential absorption lidar. The study, expected to be released in the first quarter of 2009, will compare emissions measurement methods on the basis of accuracy, cost and ease of implementation.

http://www.seas.columbia.edu/earth/sur/index.htm



## A history of partnerships for a greener future

At Waste Management, we understand the value of partnerships. We foster relationships with the communities where we operate, within our industry, and with all others who share our commitment to sustainable environmental and social goals.

# Partnering with communities

#### **Public sector opportunities**

Waste Management provides service to approximately 3,400 public sector customers, including cities, towns, counties, townships, solid waste management districts, and homeowners associations. We currently service more than 350 municipal disposal contracts and approximately 2,700 collection contracts, and operate 16 waste-to-energy plants. Public entities focused on quality and value-priced waste collection look to Waste Management for the broadest array of collection services, including residential recycling, bulky item disposal, yard waste collection, and many others.

#### Here are a few ways we work together to Think Green®.

In 2007, Renton, Washington began a pilot program providing collection of garbage, recycling and compostable waste every other week to 1,500 households. The program could be expanded to serve approximately 20,000 households as well as the city's large commercial base. When we provide comprehensive services that maximize the use of otherwise wasted materials, we expand our value to local governments.





In Seattle, Washington, plans are in place to begin a weekly food and yard waste collection in March 2009. Already the city with the smallest amount of trash per household in the nation, Seattle expects the amount of garbage to decrease even more in dense commercial and retail areas. The compressed natural gas (CNG) facility that Waste Management is building for 108 CNG trucks to service this contract will be open to the public so CNG taxis can fuel there, too.

Waste Management partnered with Monroe County in New York to operate the 95-acre Mill Seat Landfill. In 2007, Waste Management and Monroe County opened a \$9.5 million landfill-gas-to-energy plant on the site. The 10,000-squarefoot renewable energy facility is capable of generating 4.8 megawatts of energy, enough to replace more than 110,000 barrels of oil and generate electricity for more than 4,000 homes.





Our partnerships with cities extend beyond service contracts. We work with the public sector's national associations to share new ideas and best practices. For the past 19 years, we have sponsored the U.S. Conference of Mayors (USCM) City Livability Award program, which recognizes mayors for creating innovative community programs that enhance the quality of life for residents.

Waste Management is one of seven charter members of the USCM Climate Protection Council established in 2008, which aims to accelerate communitywide green projects by way of best-practice examples and public/private partnerships. We also serve on the USCM Business Council to help mayors with their collective business objectives.

## These collaborations with public sector customers produce meaningful results:

- Residential education programs to help increase recycling participation
- Environmental education programs for community schools to use in the classroom
- A convenient mail-back program called Recycle by Mail that provides a simple, safe way for customers to recycle old cell phones, batteries, fluorescent light bulbs, and ink jet cartridges. Now in its second year, the program has enrolled more than 150 communities
- Links for public sector customers to specialty programs such as WM LampTracker® (for the commercial customer), ThinkGreenFromHome.com<sup>SM</sup> (for the residential customer), and Sharps Disposal (for both commercial and residential use)

#### **Waste Management is affiliated** with these national public sector organizations:

- International City/County Management Association
- National Association of Counties\*
- National Association of Latino Elected and **Appointed Officials**
- National Conference of Black Mayors\*
- National Forum for Black Public Administrators\*
- National League of Cities
- Solid Waste Association of North America\*
- U.S. Conference of Mayors\*
- \* Waste Management has leadership representation with these organizations.

## Sharing the land

Our landfills provide for the safe, responsible disposal of waste and provide power to our communities through landfill-gas-to-energy projects. They also supply tens of thousands of acres for community parks, recreation centers, athletic fields, and Wildlife Habitat Council certified habitats.





In Danville, Indiana, we have a multi-use facility on the land surrounding our Twin Bridges Landfill that features four miles of hiking trails, an 18-hole golf course, a soccer complex, an archery club, a model airplane field, a softball complex, and a state-of-theart firing range.

Waste Management helped turn a closed landfill just outside of Denver into a 140-acre park, including a competitive BMX track and athletic fields featuring synthetic turf made of recycled rubber materials.





Our GROWS/Tullytown Landfill in Bucks County, Pennsylvania, provides approximately 6,000 acres for wildlife through green space and lakes. The wetland areas offer significant habitat for fish and waterfowl, including native blue heron, snowy egret, osprey, and the Plymouth red-bellied turtle.

In Florida, Waste Management has partnered with The National Elephant Center to create a new model for excellence in elephant care and conservation. The new elephant conservation center, slated to open in 2009, will be developed on approximately 300 acres owned by Waste Management at the Okeechobee Landfill in central Florida. It includes open space for elephants to roam while providing natural waterholes for wallowing. It is adjacent to a Waste Management nature area for threatened Florida sandhill cranes and other species certified by the Wildlife Habitat Council.



# Waste Management and the University of New Hampshire

Among our public sector partnerships in 2007 was a renewable energy project with the University of New Hampshire (UNH). The university will use landfill gas from Waste Management's landfill in Rochester, New Hampshire, to generate 80 percent to 85 percent of campus heat and electricity. The landfill gas will be piped 12.7 miles from the landfill to the university's 5-million-square-foot Durham campus.

The renewable, carbon-neutral landfill gas will replace commercial natural gas in UNH's cogeneration plant. UNH, one of the nation's leading sustainable universities, is the first institution to tap landfill gas. University President Mark Huddleston noted: "By reducing the university's dependence on fossil fuels and reducing our greenhouse gas emissions, EcoLine is an environmentally and fiscally responsible initiative. UNH is proud to lead the nation and our peer institutions in this landmark step toward sustainability." This project is ranked by the U.S. Department of Energy among the top 5 percent for energy efficiency among similar colleges and universities.

#### **Work with educational institutions**

Waste Management works with schools and educational groups in local communities on programs and educational tools such as:

- Newspapers in Education
- Earth Savers Environmental Program
- The Story of Garbage
- Mr. Cool Can
- Facility tours
- Scholarship programs
- Partnerships with colleges and universities on environmental education
- ThinkGreen.com and Greenopolis.com's Green University

Since 1994, our wholly owned subsidiary Wheelabrator Technologies has presented The Environmental Symposium, an annual educational program designed to increase environmental and social awareness among middle school students. Each year, more than 100 students from approximately 10 schools participate in the competitive program. To date, more than \$125,000 has been awarded to participating schools in conjunction with the program.

# Neighborhood safety\_

Our drivers work with local law enforcement through a program called Waste Watch®. Since the program's inception in 2004, drivers have been trained and certified to spot and report anything suspicious or dangerous to their dispatcher or directly to 9-1-1, serving as additional pairs of eyes and ears to local law enforcement. Waste Management also partners with Amber Alert, the Center for Missing and Abused Children, Community Crime Stoppers programs, and the Department of Homeland Security.

Among the hundreds of scholarship programs supported by Waste Management:						
City	San Antonio, Texas	Springfield, Massachusetts				
Scholarship	San Antonio Lending Support and Assistance (SALSA)	Building a Successful Environment (BASE)				
Details	Assists students primarily of low-income households, many of whom cannot afford to pay tuition	Motivates students interested in environmental studies				



## Charitable giving .

Waste Management pursues partnerships and alliances with communities and non-profit organizations at both the national and local level. We focus our support primarily on environmental and environmental education projects in areas surrounding our operations. It is important to our company that we provide support not only with dollars and in-kind services, but also with our investment of time as volunteers and active partners — efforts that cannot be measured in a chart with dollars and cents, but they enrich our neighbors and our company.

Waste Management piloted a new volunteer program in 2007. To date, 3,000 employees have recorded nearly 19,000 volunteer hours in 10 markets and two waste-toenergy plants. The number of locations participating in the pilot will increase to 17 in 2008.

Waste Management Charitable Contributions in 2007				
Cash	\$6,881,650			
Foundation	\$1,760,000			
In-kind/Discounts*	\$2,682,000			
2007 Total	\$11,323,650			
* Conservative estimate due to difficulties in tracking.				

# **Partnering with customers**

Waste Management finds many ways to partner with customers on initiatives and projects that have widespread impact.

#### **Waste Management Upstream**

We have a small but growing comprehensive service offering called <u>Upstream</u>. Upstream works with commercial and industrial customers to help them achieve their environmental goals — from waste reduction, treatment and recycling services to fulfilling their zero-waste goals. For many customers, we can achieve 75 percent to 90 percent waste reduction — with an economic benefit for them. Upstream saved its customers an average of \$285,000 per year per facility from 2005 through 2007.

## Here are some examples:

We can help our customers achieve zero waste through evaluating and changing the company's operational processes that generate the waste, its material management methods, and its employee and service provider habits. Through this approach, we have provided zero-landfill solutions to General Motors' Marion and Indianapolis, Indiana, plants.

For Coors, we undertook an evaluation of the company's supply chain management of obsolete and off-spec product and created a nationwide zero-landfill program for its returned products.



# Partnering for a more sustainable society

We find many opportunities to join with others to improve the world in which we live and work. Our contributions take many forms, including the commitment of time and services, financial contributions, and the delivery of services for community events. We find opportunities to make a difference on both a national and local level.

# **Keep America Beautiful**

Keep America Beautiful, the nation's largest volunteerbased community beautification organization, has been a key Waste Management partner for 25 years. Waste Management contributes more than \$1 million annually to support our communities through local Keep America Beautiful affiliates in their efforts to prevent litter, reduce waste, promote recycling, and improve communities through beautification projects.

#### **Habitat for Humanity**

In 2007, we participated as a partner in the Jimmy and Rosalynn Carter Habitat for Humanity Work Project in Los Angeles. In 2008, we announced a three-year, \$1 million partnership with Habitat for Humanity to further the organization's mission of building decent, affordable housing. Waste Management will provide monetary support, in-kind donations and a variety of waste disposal services to Habitat affiliates across the U.S. and Canada. As part of this partnership, our employees participate in building Habitat homes throughout the U.S. We have also played a key role in helping Habitat for Humanity and the 2008 Carter Work Project meet local construction recycling requirements and reach the project goal of the Leadership in Energy and Environmental Design's (LEED) silver certification.

#### In 2007, Waste Management:

- Awarded \$10,000 grants to 18 Keep America Beautiful (KAB) affiliates across the country for programs that promote recycling, beautification and revitalization.
- Awarded \$5,000 grants to 10 local KAB
   affiliates for special local improvement projects
   during The Great American Cleanup, the
   nation's largest community improvement
   event. In 2008, Waste Management will
   increase the number of grants to 17.
- Awarded \$5,000 grants to 15 local KAB affiliates through WM's Target Cities Awards Program. In 2008, the program will expand to provide awards to 21 affiliates.

#### The green community.

Waste Management has a role in developing innovative, far-reaching mechanisms to promote environmental education and collaboration on more sustainable practices. In 2007, we announced the launch of an interactive social network that enables people to learn, act and earn rewards for making a positive impact on the environment. **Greenopolis.com** is a social networking site that develops online relations between everyday people, communities, organizations, schools, and businesses. It contains sustainability resource guides, green job sites, social networks, and links to educational organizations and grant-making institutions. Greenopolis was developed to serve as an educational tool to teach people how to be more environmentally sound as they go about their daily lives. The goals for the Web site are summed up in its tag line: "Learn. Act. Reward. Together."



#### ThinkGreen.com

Looking for innovative ways to engage stakeholders, protect the environment, and grow its business, Waste Management launched **ThinkGreen.com**, an interactive Web site that describes what our company is doing to protect the environment. ThinkGreen.com uses interactive 3D animation technology and graphics to help users learn how we "Think Green®" in our day-to-day business. Users can take self-quided online tours to see how we create energy from waste, how single-stream recycling works, and the benefits of recycling.

#### Don't Waste It .

In early 2008, a new interactive exhibit opened at Epcot® at the Walt Disney World® Resort. The experience, called "Don't Waste It," is a collaboration between Waste Management and Walt Disney Imagineering, showcasing our contributions in the areas of environmentalism, recycling, beautification, and energy conversion. Located in INNOVENTIONS at *Epcot*®, the exhibit brings the story of how waste and technology can simplify and enhance our lives to the millions of people who visit Epcot® each year.

#### **Outreach on environmental justice**

A cornerstone of modern environmental policy is the protection of human health and the environment in all

communities. Waste Management has been an active participant over the past two decades in discussions about how federal, state, and local regulatory programs can ensure environmental justice and how regulators, community members, environmental and civil rights advocates, business, and industry can work together toward the goal of environmental justice.

This commitment led Waste Management to become the principal sponsor for scholarships for Environmental Justice Summits held in 2006, 2007, and 2008, co-sponsored by the U.S. Environmental Protection Agency, the U.S. Department of Energy, the U.S. Department of Agriculture, the National Small Town Alliance, and Howard University.

## **External Sustainability Advisory Group**

To ensure that we do the best possible job of meeting our standards and achieving our goals for sustainability, the Waste Management Sustainability Performance Leadership Team (SPLT) recommended that we create an External Sustainability Advisory Group (ESAG) to provide advice to the internal Corporate Sustainability Council, Senior Leadership Team, and Waste Management staff charged with implementing our sustainability initiatives.

This concept is under active consideration. An ESAG would be composed of representatives from business (including customers), financial experts (including socially responsible investors), non-governmental organizations, academics, and government. It would provide Waste Management with guidance on developing and executing growth through sustainability programs and goals, and could be a mechanism to provide input on the next Waste Management Sustainability Report.



# "Don't Waste It" leads by example

Many recycled materials were used to build "Don't Waste It":

- The carpet was made from reused tires
- The tile was created from recycled glass and granite chips
- Baseboards and console panels were made from aluminum shavings
- The railings used in fill panels were made using old milk cartons



# Research and innovation

At Waste Management, innovation is a vital component of a sustainable future. We are using our expertise and technology to enhance the ways we protect the environment.

# Innovation in landfill technology

Waste Management believes that small changes in landfill operating methods today can yield substantial environmental benefits in the future. Our Next Generation Technology® is an innovative landfill design offering important benefits by employing bioreactor treatment technology:

- Accelerating the decomposition of waste in landfills so that the property becomes adaptable for beneficial reuse much faster after the facility closes
- Where service is needed, extending landfill life
- Speeding the production of landfill gas, which can be collected and used to produce renewable energy

Waste Management has 22 projects employing Next Generation Technology®. Collectively, these projects are providing us with valuable information at an operational scale. We are working with the U.S. EPA, the U.S. Department of Energy, and experts in the public and private solid waste sector to develop the engineering knowledge base and operational expertise to enable widespread implementation of this technology.



#### What is Next Generation Technology®?

Simply put, it is a waste treatment landfill operated with technology that accelerates the decomposition of organic wastes in a landfill by introducing non-toxic liquids. A recent study found that over a 40-year period, both the methane recovery and green power production from a Next Generation Technology® landfill are 31 percent to 43 percent higher than from a conventional landfill.24



# Innovation in service offerings

# Single-stream recycling

<u>Single-stream recycling</u> streamlines and simplifies the process of collecting and processing recyclable materials, increasing program participation on average by 30 percent in volume. When single-stream recycling began, some paper manufacturers worried that commodity quality would suffer from this commingling. That has changed. Our customers have established strict thresholds for quality, and we have had no problem meeting those standards. In fact, our single-stream plants have a rejection/residual rate 33 percent lower than our materials recovery facilities using other methods.

## Landfill-gas-to-energy

Landfills with landfill-gas-to-energy capacity provide an environmentally protective way to turn organic wastes like food and yard waste into renewable energy. One truck can pick up these wastes with the rest of the trash, reducing truck traffic and further reducing emissions. Waste Management will provide consulting services to make its 20-year expertise installing and operating landfill-gas-to-energy technology available to local governments and members of the solid waste industry seeking to make use of this renewable resource.

#### **Transfer station recyclables mining**

Certain incoming industrial materials — such as corrugated containers, plastics and metals — can be "mined" to extract key commodities from the waste stream at municipal waste transfer stations for recycling before being contaminated by other forms of waste and sent to a landfill. Waste Management is piloting this practice at its transfer stations.

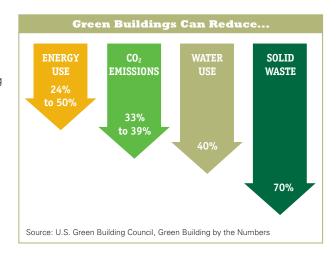
#### **Assured product destruction**

Highly sensitive waste material such as off-spec, obsolete or damaged products, proprietary business documents, Drug Enforcement Agency contraband, and discarded healthcare products or pharmaceutical waste must be completely destroyed. WM provides confidential and transparent assured destruction, with full documentation and certification.

#### **LEED** certification

Leadership in Energy & Environmental Design (LEED) certification provides independent, third-party verification that a building meets the design and performance standards established by the United States Green Building Council (USGBC). Waste Management is engaged in green building design, construction and operation, both for our own facilities as well as service offerings to our customers.

A recent study in California identified that an average increase of 2.5 percent in building costs resulted in an average of 30 percent savings in operating costs. Often, buildings received the same benefit with no increase in building costs.



Our Green Squad assists customers in meeting their desired level of LEED® certification for existing building operations and maintenance, for new construction, and for renovation projects.

#### **Green Squad**

The <u>Green Squad</u>, part of Waste Management's <u>Upstream</u> division, assesses a customer's current operations, looking for environmental options to enhance sustainability. Green Squad audit teams help businesses reduce their environmental impact and waste sent to landfills by designing solutions ranging from simple recycling plans to complex zero-waste initiatives. In addition to waste solutions, Green Squad provides a complete spectrum of eco-solution services for industrial and commercial businesses of all sizes and sectors, including sustainability solutions in energy, water, real estate efficiency, event and venue management, and construction and demolition materials management.

"Customer partnerships are at the center of Ecomagination. A good example is Waste Management, whose Think Green® business strategy aligns with a number of GE businesses. Our companies share a commitment to sustainable, organic growth built upon industry expertise and strong technology. Our collaboration will grow to include GE Jenbacher gas engines that burn landfill gas, land use for wind- and solar-power generation, hybrid commercial vehicles, and emerging waste-conversion technologies that produce electricity or synthetic fuels."

– General Electric 2007 Annual Report

# Innovation through collaboration

Waste Management understands the value of working with others to spearhead innovation and progress. We partner with a number of outside entities — from government organizations and universities to non-governmental organizations, communities, and our own customers — to draw together our collective expertise and resources.

- The Interstate Technology and Regulatory Council (ITRC) is a state-led coalition that works with industry and stakeholders to achieve regulatory acceptance of innovative environmental technologies. From 2006 to 2008, Waste Management employees participated actively with the ITRC to develop guidance and provide hands-on training in the construction and operation of bioreactor technology, use of alternative cover to enhance protection at closed landfills, and best practices to oversee and evaluate long-term care of closed landfills.
- · Waste Management partners with the U.S. EPA's **National Risk Management Research Laboratory** to conduct research on several Next Generation Technology® landfills through a Cooperative Research and Development Agreement (CRADA). The purpose of this joint research effort is to collect information to ascertain best operating practices for **Next Generation** Technology® landfills.
- WM is working with its customers on new ways to generate renewable energy. In Pennsylvania, we are working with Exelon Generation Company and Epuron on new solar energy technology. In August 2007, the companies announced the construction of the nation's fourth largest solar photovoltaic (PV) generation project at our site in Fairless Hills. This project will feature approximately 17,000 panels to capture the sun's rays and convert them into three megawatts of electricity, or enough power for 2,400 homes.

• Waste Management and Linde North America are partnering to develop the world's largest facility to convert landfill gas into clean vehicle fuel. A liquefied natural gas (LNG) facility to be constructed at the Altamont Landfill near Livermore, California, is expected to produce up to 13,000 gallons a day of LNG. The project is receiving grant assistance from the California Integrated Waste Management Board, the California Air Resources Board, and the South Coast Air Quality Management District.





# **Public policy issues**

Waste Management believes good citizenship includes working with others from very different perspectives to make progress solving environmental challenges. Dialogue among communities, environmental advocates, and representatives from government, business, and industry is vital to building consensus for positive change.

# Participation in the public policy debate

Waste Management engages in local partnerships of many kinds with all the communities in which we operate. For all major projects, this participation is formalized in procedures applicable company-wide that assure we understand the needs and concerns of the communities near our facilities, and we work together with community partners toward mutual goals.

Waste Management also participates actively in broader policy-oriented dialogues on subjects material to our business: environmental standards and best practices, new technology, climate change, conversion of waste into resource, optimal environmental facility design and operation, and production of green energy.

Level	Business Association	Multi-stakeholder Groups
National	American Trucking Associations Business Network for Environmental Justice (steering committee) Council of Industrial Boilers Energy Security Leadership Council (board member) Environmental Industries Association (board member) Integrated Waste Services Association (board member) National Association of Manufacturers (board member) National Recycling Coalition (board member) National Solid Wastes Management Association RCRA Corrective Action Project Secure America's Future Energy (board member) Superfund Settlements Project U.S. Chamber of Commerce	American Legislative Exchange Council The Climate Registry Stakeholder Advisory Committee Diversity Best Practices Environmental Justice 2007 Summit (board member) Environmental Media Association (corporate board) Habitat for Humanity (local board member) International County and City Management Association Junior Achievement (local board member) Keep America Beautiful (board member) National Academies of Science National Research Council (advisory council member) National Association of Counties Green Government Initiative National Association of Local Government Environmental Professionals National Black Caucus of State Legislators (chair, Corporate Roundtable) National Conference of Black Mayors Business Council (chair) National Council of State Legislators (foundation member) The National Elephant Center (board member) North American Association of Environmental Educators (board member Solid Waste Association of North America Sustainable Remediation Forum Urban League (local board members) U.S. Conference of Mayors Business Council (co-chair) U.S. Conference of Mayors Climate Protection Council U.S. EPA's Environmental Finance Advisory Board (work group co-chair) U.S. EPA's National Environmental Justice Advisory Council (co-chair, two work groups) U.S. Green Building Council Wheelabrator Symposium for the Environment (annual) Wildlife Habitat Council (board member)

Level	Business Association	Multi-stakeholder Groups
State	Accordation of Commerce & Industry	•
Jidle	Association of Commerce & Industry Environment Committee	American Public Works Association, NY Branch California Cumulative Risk Advisory Committee
	Minnesota Chamber of Commerce Recycling Committee	,
	Professional Recyclers of Pennsylvania	"Environment Virginia" sponsor
	(board member, president)	lowa Governor's Anti-Litter Task Force
	Recycling Alliance of Texas (board member and officer)	Junior Achievement of Southeast Texas (board member)
	State chapters, National Solid Wastes	Kansas Governor's Energy and Environment Plan (KEEP)
	Management Association	Minnesota Environmental Initiative (board member)
	Virginia Waste Industries Association (chair)	Minnesota Governor's Climate Change Advisory Task Force
		Minnesota Pollution Control Agency Product Stewardship and Construction and Demolition Task Forces
		Minnesota Waste Wise (board member)
		New Mexico Environment Department Working Groups on Environmental Justice and Recycling
		New Mexico Governors Task Force on Greenhouse Gases
		New Mexico Recycling Coalition (board member)
		Pennsylvania Environmental Justice Advisory Committee
		Regional Greenhouse Gas Initiative
		Southern Governors' Association (corporate affiliate)
		State chapters, Keep America Beautiful (board members and officers
		State chapters, Solid Waste Association of North America
		(board members and officers)
		Texas Society for Ecological Restoration
		Virginia Attorney General's Government & Regulatory Reform
		Task Force
		Western Climate Initiative
Local	Canton Road Business Association (board member)	American Public Works Association, Monroe County
	Ferris Main Streets Board	Big Brothers/Big Sisters (board member)
	Greater DFW Recycling Alliance (Secretary)	Bucks County Park and Recreation Board (Chairman)
	Local Chambers of Commerce (board members)	Buffalo Bayou Partnership (board member)
	North Texas Corporate Recycling Alliance	City and County of Honolulu Solid Waste Advisory Committee
	Rio Rancho Chamber	Cobb County Neighborhood Safety Commission (board member)
	Southern California Sustainability Support Group	Crime Stoppers (board member)
	Texas Society for Ecological Restoration (Secretary)	DaCamara (board member)
	locas society for Ecological Hestoration (Secretary)	End Hunger Network
		Ferris Main Streets Board
		Greater Houston Partnership (board member)
		Green Houston (board member)
		Hermann Park Conservancy (board member)
		Houston Wilderness (board member)
		Leadership Houston (board member)
		Local government chapters, Keep America Beautiful
		(board members and officers)
		Nature Conservancy of Houston (board member)
		New York City Center for the Urban Environment
		Orion Township "Look for the Good" campaign
		Orion Township Recycling Committee
		The Park People (board member)
		Simi Valley Boys & Girls Club (board member)
		Simi Valley Education Foundation (board member)
		Simi Valley Police Foundation (board member)
		Sun Valley Beautiful
		USC "SEER" Project
		Washington DC Metropolitan Scholars (board member)
		Women's Center (board member)
		A AOUTION 9 CENTER (Dogra HIGHIDEL)

#### The political arena

Waste Management believes that participation in the political process is important because of the diverse interests of our business and employees. The company complies with all applicable laws concerning political contributions, including requirements for public disclosure of political contributions and lobbying expenses. Our contributions are reported under federal, state and local campaign finance laws and are available to the public. Our policies are published in a Code of Conduct disseminated to all employees. We do not expect candidates to whom we contribute funds to agree with our positions on all issues at all times. We seek to support candidates who recognize the importance of the environmental services we provide, and recognize that a fair, free-market system provides the best environment for continued improvement of cost-effective services.

# Critical policy issues and challenges

Waste Management has a history of active participation in the public debate on environmental issues at the federal, state, local and community level. We believe that active engagement with stakeholders from different points of view is the foundation for sound environmental policy and practice. As we look forward to a more sustainable future, we see several issues on the horizon that will challenge the environmental services industry:

The need for sound regulatory frameworks for emerging technologies. The strength of our original, core operations — collection fleet, landfills, waste-toenergy facilities — is built upon long-standing and rigorous regulatory obligations backed by federal, state and local oversight. The environmental statutes applicable to these facilities have mandated detailed regulations based on sound science and best technology, developed after extended dialogue with the public as standards are proposed and continually improved.

The environmental services industry is in transition to include new options — such as conversion technologies to turn wastes into valuable resources, but baseline national regulatory standards have not emerged to impose comparable controls. Even some long-standing, but currently expanding, waste reuse options like composting do not have comprehensive controls comparable to landfills and waste-to-energy facilities subject to the federal Resource Conservation and Recovery Act.

As Waste Management enters emerging fields, the lack of protective, national regulatory baselines challenges our ability to provide superior service in a very competitive marketplace.

Climate change reporting. Waste Management's experience in calculating its carbon footprint has highlighted the challenge many entities face as they account for greenhouse gas emissions in the absence of clear national procedures. Interest in controlling and reducing greenhouse gas emissions counsels the need to move forward with inventorying and providing incentives to reduce emissions. In the interim, however, all reporting entities will experience significant costs, inconsistencies among varying reporting regimes, and potential missteps as they grapple with complex accounting and recordkeeping requirements. Even the best estimates will be subject to change as the requirements for greenhouse gas reporting and response are refined over time.

#### Cleaner heavy duty vehicles.

Although Waste Management has been a leader in partnering with truck manufacturers and other vendors to reduce emissions and fuel consumption from its on-road and off-road vehicles, we remain dependent upon engine manufacturers for dramatic improvements in technology.

#### Community environmental concerns.

We are committed to being a trusted and valued community partner in every community in which we operate. Waste Management provides benefits to many, but residents neighboring our facilities sometimes feel the benefits of our environmental services are greater for those distant from the facility than for those who live next door. We take community concerns very seriously and commit substantial time to discussions with community groups, environmental organizations, and governmental officials at the federal, state and local levels as we all work to shape an environmental regulatory system that improves environmental quality in all communities.

# Awards and recognition

# Waste Management has received recognition for its work in many areas. The following list is representative of the scope of the awards.

#### **California Climate Action Leader**

In May 2008, Waste Management was named Climate Action Leader by the California Climate Action Registry.

## **Environmental Leadership Award**

In 2007, a partnership involving Chrysler LLC and Waste Management Upstream received the Environmental Leadership Award. The award was given for <u>minimizing waste from painting operations</u> at the Chrysler St. Louis Complex and for using the recovered paint solids as an alternative fuel at the local power-generating electric utility. The project reduced total paint waste costs by 92 percent, eliminated the need to landfill paint waste, and provided enough beneficial fuel to power 70 homes for a year.

#### **OSHA Awards**

Waste Management subsidiary <u>Wheelabrator</u> received the <u>OSHA Regional Administrator Award</u> for 2007. As further recognition of its exemplary safety performance, Wheelabrator was recruited by OSHA to serve as a safety mentor and lend its expertise to the U.S. Department of Defense to help reduce incident rates and lost workdays. As of 2007, all of Wheelabrator's energy plants have achieved VPP Star ranking, OSHA's highest safety recognition.

#### **Environmental Leadership Awards**

- Anthracite Region Independent Power Plant Association Rock Burner of the Year
- California OSHA Star
- Colorado Springs Business Journal Best Recycling/Waste Company of the Year
- Dow Jones Sustainability Index (only U.S. waste services company, 2006–2008)
- Fort Worth Pretreatment Associate Award
   (2 consecutive years of compliance) (Closed site)
- Fort Worth Pretreatment Star Award Westside Recycling & Disposal Facility (1 year of compliance)
- Governor of Iowa Environmental Excellence Award
- Governor of Minnesota GREAT Award
- Greater Houston Partnership Quality of Life Visionary Award (recycling)
- Hispanic Engineer National Achievement Awards Corporate Stewardship Award
- Irving Environmental Excellence Award
- Keep Irving Beautiful Ben Carpenter Environmental Vision Award

- Keep Texas Beautiful 2nd Place Ebby Halliday/Maurice Acers Large Industry Environmental Excellence Award
- Los Angeles Business Journal Top Environmental Firm
- New Mexico Recycling Coalition Business of the Year, 2006
- New Mexico Recycling Coalition Recycler of the Year
- Public Works Project of the Year/Environmental, Mill Seat Landfill-Gas-to-Energy Facility
- Recycling Alliance of Texas Award of Merit
- Regional Municipality of Wood Buffalo Environmental Achievement Award
- San Diego EARTH Award, 2008
- Solid Waste Association of North America Distinguished Service Award
- Solid Waste Association of North America Gold Award for Landfill Management Excellence
- Solid Waste Association of North America Gold Collection System Award
- Solid Waste Association of North America Outstanding Solid Waste Professional – Private Sector

#### **Environmental Leadership Awards (continued)**

- State of California Department of Toxic Substances Control green vehicle maintenance shops (3)
- West Virginia Department of Environmental Protection Best Municipal Landfill
- Wildlife Habitat Council's 2006 President's Award
- World Business Council for Sustainable Development "Sustainability Leader" for the Waste and Disposal Services Sector, 2007-2008
- U.S. EPA Region 2 Environmental Merit Award

#### **Community Leadership Awards**

- City of Houston Police Department Humanitarian Award
- City of Simi Valley Appreciation
- Keep America Beautiful Community Improvement Partner Award
- Keep Houston Beautiful 2007 Mayor's Proud Partners Award
- Keep Texas Beautiful Star Award
- LA Top Environmental Firm
- Mothers Against Drunk Driving Outstanding Corporate Leader Award
- National Black Caucus of State Legislatures Soaring Eagle Award
- National Sheriffs' Association Award of Excellence
- North Texas Corporate Recycling Council Volunteer of the Year Award
- Ohio Volunteer of the Year
- Pacific Business News Business Leadership Hawaii, finalist in Best in Business Division II
- U.S. Conference of Mayors Outstanding Achievement Award
- San Diego Habitat for Humanity Groundbreaking Award
- San Diego Peacemaker Award, National Conflict Resolution Center
- · Simi Valley Boys & Girls Club Business of the Year
- Simi Valley Police President's Award

## **Employer of Choice Awards**

- David Steiner, Waste Management CEO, "100 Most Influential People in Business Ethics"
- Diversity Business DIV50 Supplier Diversity
- EIA Driver of the Year
- Ethisphere "Most Ethical Companies"
- New Hampshire Best Company to Work For
- Savoy Professional Top 100 Companies for Diversity
- Service Industry Advertising Award, Best in Show

#### **Supplier of Choice Awards**

- Alcoa EHS Achievement Award 2005
- Coors Gold Supplier Award, 2005, 2006, 2007
- Daimler-Chrysler Environmental Leadership Awards, 2006, 2007
- Eastman Kodak Contractor HSE Excellence Award, 2006
- Ford Kentucky Truck Plant Environmental Award, 2007
- General Motors Team Award, 2007
- IR Magazine Top 100 Best Investor Relations
- Lewisville Chamber of Commerce Business of the Year
- Raytheon Corporate Audit Grade A, 2006
- Sandy City, Utah Public Works Contractor of the Year
- · Simi Valley Business of the Year
- Suncor President's Operational Award (nominee), 2006, 2007
- Texarkana Industrial Business of the Month
- Tyson Foods Supplier of the Year
- U.S. Conference of Mayors Outstanding Achievement Award in Public/Private Partnerships

# **Key indicators of progress**

# **2007 Sustainability Goals**





Waste Management Fleet Efficiency 2007–2020					
Year	Capital spending	Fuel efficiency increase	Fleet emissions reduced	Cost savings	
2020	\$4 billion to \$5 billion	15% aggregate	15% aggregate	\$1 billion	



# **2007 Additional Key Goals**

Key Goals					
Focus area	Goal	Progress in 2007			
Worker safety	Mission to Zero worker injuries	<b>71 percent reduction</b> in the number of on-the-job accidents since 2001			
Groundwater protection	Protect the groundwater neighboring WM properties	As of 2007, <b>no WM modern landfill</b> has ever needed to take remedial action to clean up groundwater on neighboring property			
Climate change	As a founding member of the Chicago Climate Exchange, meet goal of reducing GHG emissions by 6 percent from 1998–2001 baseline	Certified in compliance each year since inception of the program			

# **Other Key Metrics**

Resource Savings Potentially Achieved Through Renewable Energy					
Year	Gross MWH/Year	Energy equivalent in homes powered	Energy equivalent in tons of coal potentially offset	Energy equivalent in barrels of oil importation potentially avoided	
2007	8,821,000	1,149,000	4,134,000	14,536,000	

	Resource Savings Achieved Through Recycling					
Year	Tonnage	Material	Energy Equivalent (in homes powered)	GHG Reduced (passenger car equivalents)		
2007	7.6 million	Total recyclables managed. Includes: • 4.6 million tons processed • 3.0 million tons brokered	1,336,000	4,750,000		
2006	5.6 million	Total recyclables processed by WM	958,000	3,100,000		

Total Environmental Expenditures					
Year	<b>Environmental costs</b> (in millions)	<b>Total annual expenses</b> (in millions)	Percentage of environmental cost to total expense		
2007	\$4,279	\$11,056	39%		
2006	\$4,468	\$11,334	39%		

# Other Key Metrics (continued)



Environmental Performance 2004–2007	
E <sup>3</sup> Scorecard scores	Improved more than 35%
Incomplete compliance module tasks (tasks addressing conditions before they can become compliance violations)	Reduced more than 90%

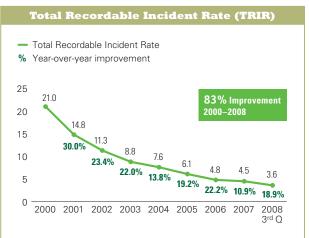
Reductions in TRI Chemical Releases at Waste Management Hazardous Waste Facilities (in pounds)						nent		
Release	2000	2001	2002	2003	2004	2005	2006	Reduction in 2006 from highest year release
Air	17,237	32,605	15,112	10,163	9,257	9,984	8,436	74%
Surface water	2,844	195	186	114	169	27	4	99%

## Other Key Metrics (continued)

Improvement in Fleet Performance in 2007				
WM Initiatives	Improvement in driver/route efficiency/fleet emissions			
Standardized route optimization planning				
5-minute idle shut down time	•			
More than 1000 after-treatment devices installed	2 million hours			
Conversion to ultra low sulfur diesel				
Limits on top engine speed	Z IIIIIIOII IIOUIS			
Increased use of biodiesel				
Evaluation of propane as fuel				
Use of LNG and CNG in nearly 1,000 trucks				



vehicle accidents.



The Total Recordable Incident Rate reflects the number of injuries that occur for every 100 employees annually.

Workforce Engagement Improvements in Pilot Market Areas (2007)			
Increase in operating profit	30.0%		
Increase in safety (measured by decrease in Total Recordable Incident Rate)	83.0%		
Fleet performance improvement (measured in cost per hour)	15.2%		
Decrease in voluntary employee turnover	83.0%		

Employee Engagement Improvement Through Breakthrough Performance Leadership Program Pilots (2007)		
Increase in measured employee engagement	55%	
Increase in safety (measured by decrease in TRIR)	11%	

## Index

Waste Management looked to the Global Reporting Initiative (GRI) for guidance on selection of goals and metrics material to the company's environmental and social footprint, and for the general scope of this report on environmental and social indicators. Where metrics recommended in GRI are applicable to WM and data available, we have included this information, but we have not endeavored to report "in accordance with" GRI. Much of what we do is not amenable to a reporting regime better suited to producers of goods who are attempting to minimize environmental impacts. Waste Management in essence provides the infrastructure for others' sustainability efforts. As a result, our reporting has largely focused on the breadth and productivity of our environmental service offerings.

For the convenience of those familiar with GRI formats, the index below identifies specific GRI topics that are addressed, directly or indirectly, in this report.

Section #	Disclosures	Location	
Strategy	and Analysis		
1.1	Chairman and CEO statement	CEO letter	
1.2	Section 1 – Key impacts, risks, and opportunities	CEO letter, 3, 29–31 41–42, 47	
Organiza	ational Profile		
2.1–2.9	Company description	Annual Report	
2.10	Awards received in the reporting period	48–49	
Report P	'arameters		
3.1	Reporting period	2005–2007	
3.2	Date of previous report	2005	
3.3	Reporting cycle	Biennial	
3.4	Contact person	Lynn Brown Lynnbrown@wm.com 713-394-5093	
3.5	Process for defining report content	7, 54	
3.12	GRI index	54–55	
3.13	Policy and practice regarding external assurance	7, 29–31, 39	
Governa	nce, Commitments and Engagement		
4.1	Governance structure of the organization	17	
4.2	Whether Chairman of the Board is an executive officer	17	
4.3	Independent and/or non-executive directors of the Board	17	
4.7	Expertise of the Board on sustainability issues	17	
4.8	Mission, values, codes of conduct, and principles	CEO letter, 7, 15, 20–21, 28	
4.9	Board procedures for overseeing sustainability performance	17	
4.12	External economic, environmental, and social charters, principles, or other initiatives CEO le 21, 29		
4.13	Memberships in associations and multi-stakeholder groups	7, 14–15, 29–31, 34, 36, 38–39, 43, 45–46	
4.14	List of stakeholders engaged	7, 14–15, 29–31, 34, 36, 38–39, 43, 45–46	
4.16	Approaches to stakeholder dialogue	45–47	

Section #	Disclosures	Location	
	nent Approach and Performance Indicators		
Economic		A ID 150	
EC1	Direct economic value generated and distributed	Annual Report, 5–6	
EC2	Climate change financial implications, risks and opportunities	29–31 	
EC4	Public service financial benefits	33–37	
EC6	Policy on local suppliers	28	
EC8	Infrastructure investments and services provided primarily for public benefit	5–15, 25, 33–35, 42	
Environme	·· <del>···</del>		
EN2	Recycled input materials used	12–13	
EN3	Direct energy use	29–31	
EN4	Indirect energy use	29–31	
EN6	Energy efficiency initiatives or renewable energy sources	CEO letter, 7-11	
EN7	Energy use reduction initiatives	7, 14	
EN13	Habitats protected or restored	CEO letter, 14-15, 35	
EN14	Future plans for habitats	CEO letter, 14-15	
EN16	Greenhouse gas emissions	29–31	
EN17	Relevant indirect greenhouse gas emissions	29–31	
EN18	Initiatives to reduce greenhouse gas emissions	CEO letter, 7–11, 14, 29–31, 41–42	
EN22	Total waste	5–6, 25	
EN26	Initiatives to mitigate environmental impacts of services	CEO letter, 5–15, 17–21, 26–27, 41–43	
EN27	Percentage of packaging materials that are reclaimed	12–13	
EN28	Compliance with environmental laws and regulations	18–21, 23–25	
EN29	Transportation impacts	CEO letter, 7, 14, 20–21, 26–27	
EN30	Total environmental expenditures	18	
Labor Pr	actices and Decent Work Performance Indicators		
LA7	Rates of injury	27	
LA11	Programs for skills management and lifelong learning	18–19, 21, 22–23, 38	
 LA13	Diversity of governance bodies and workforce	28	
Society P	erformance Indicators		
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering,	7 14 15 24 22 20	
	operating and existing	7, 14–15, 24, 33–36	
SO5	Public policy positions and participation in public policy development and lobbying	45–47	
SO6 	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	47	
S08	Significant fines	Annual Report	

# Make the color of our world the color of yours. **Think Green®.**

# For Businesses and Municipalities

#### **Comprehensive Environmental Services**

Need environmental services? Want to evaluate your options to reduce, reuse, recycle waste and see your waste turned into an energy resource? Think Green — Think Waste Management. www.wm.com

## **Want Advice on How to Reduce Waste and Save Money?**

**Contact Waste Management Upstream, the consultant** of choice when you want to review your waste and environmental footprint, reduce costs and assure regulatory compliance.

www.wmupstream.com

## **Interested in Greening Your Company** and Its Supply / Distribution Chains?

Find out how by reading our sustainability white paper, "A Practical Guide to Developing a Successful Corporate Sustainability Program." www.wmupstream.com/documents/ SustainabilityWhitepaper.pdf

## **Want to Learn How We Safely Convert Everyday Trash into** Clean, Renewable Energy?

Consult Wheelabrator's Web site to see how Waste Management's waste-to-energy plants operate. www.wheelabratortechnologies.com

#### **WM Recycle America**

Contact your one-stop source for recycling, WM Recycle America. We offer municipalities costefficient, environmentally sound recycling programs, and can provide manufacturers with the secure, consistent stream of high-quality raw materials they need to maintain operational efficiency. www.recycleamerica.com

# **Hazardous Waste Management**

Need help safely managing hazardous waste? **Contact Waste Management.** www.wmdisposal.com

#### **Industrial Services**

Need help disposing of waste — and learning about how to save money and protect the environment? Call Waste Management Industrial Services. www.wmdisposal.com/services

# For Everyone

#### **Environmental Information**

Want to know more about environmental facilities and services? Check out Think Green, an interactive site on how to reverse your thought process and put the 4 R's (Reduce, Reuse, Recycle, and Recover the resource) into action. What is waste in reverse? It is waste given a renewed purpose as a resource.

www.thinkgreen.com

#### **Waste Electronics**

Need help disposing of that old computer, telephone, or TV? From cameras to televisions, "Sony Take Back" gives Sony customers a free and convenient way to recycle up to five Sony products per day by dropping them off at designated Waste Management eCycling **Drop-Off Centers throughout the country.** www.wm.com/sony. Or contact Waste Management. www.wmescraptracker.com

#### **Medical Waste Disposal**

Waste Management offers a safe, confidential and cost-effective way of disposing of used hypodermic needles, lancets, test strips and other medical waste. It ensures that your medical waste will be delivered safely by the U.S. Postal Service to a certified medical waste resource recovery facility for destruction. www.wm.com/wm/services/healthcare/medwaste.asp

#### **Recycle Dry Cell Batteries**

Use our recycling box to store used alkalines (AAA, AA, C, D, 9 volt and 6 volt), button cells, and rechargeables. The kit includes a pre-paid return shipping label, so when the box is full, simply seal it and place by your mailbox for postal pickup. www.thinkgreenfromhome.com/batteries.cfm

#### **Recycle Fluorescent Bulbs Safely**

The WM LampTracker® recycling program is a safe and cost-effective way to manage this easy-to-overlook environmental and health risk. The program includes prepaid postage via UPS or FedEx ground and complete online documentation. www.wmlamptracker.com

## **Connect with the Green Community**

Check out Greenpolis.com for the latest news, views, products and services. This online community is sponsored by Waste Management. www.greenopolis.com

## Freecycle

Have stuff you don't need? Want to share with others? Use Freecyle or Earth911 to find people who can put to use what you no longer want. This service is sponsored by Waste Management. www.freecycle.org www.earth911.org

