



# Leading Change

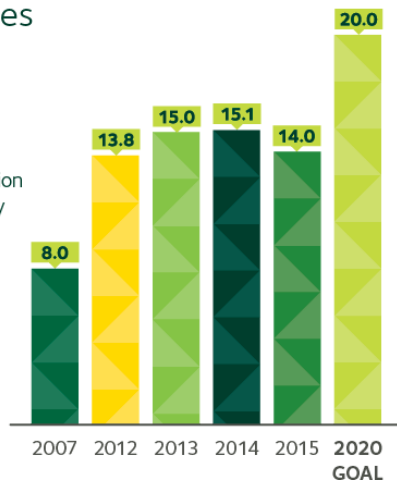
2016 Sustainability Report



# Goals and Progress to Date

## Recyclables Managed (million tons)

**GOAL**  
Recycle 20 million tons annually by 2020

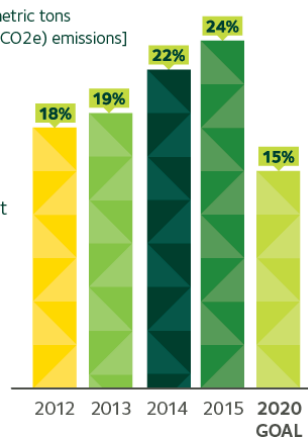


## On-Road Fleet Emissions Reductions<sup>1</sup>

[percent reduction in million metric tons carbon dioxide equivalent (MtCO<sub>2</sub>e) emissions]

**GOAL**  
Reduce the carbon dioxide emissions and improve the efficiency of our on-road fleet vehicles by 15 percent by 2020

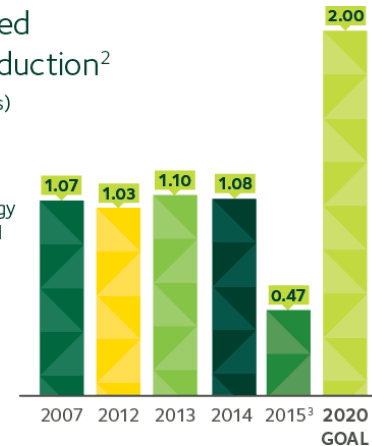
2007 emissions:  
**1.94 million**  
metric tons CO<sub>2</sub>e



## Waste-Based Energy Production<sup>2</sup>

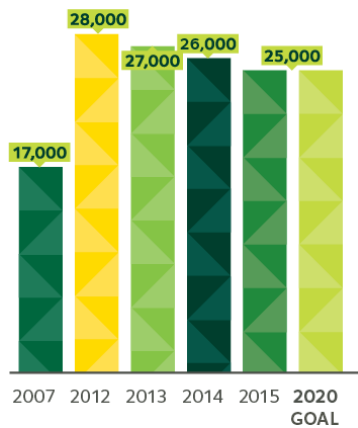
(million households)

**GOAL**  
Produce enough waste-based energy to meet the annual energy needs of 2 million households



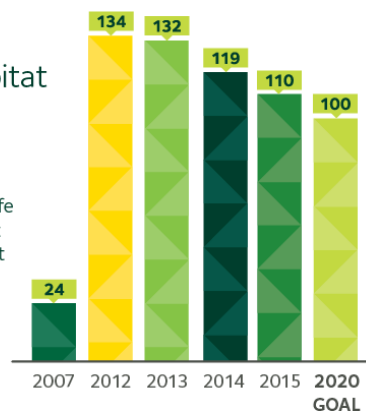
## Number of Acres Protected

**GOAL**  
Protect 25,000 acres by 2020



## Number of Wildlife Habitat Programs<sup>4</sup>

**GOAL**  
Establish 100 wildlife habitat programs at Waste Management sites by 2020



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

<sup>2</sup> Total includes landfill gas-to-energy, waste-to-energy, solar, waste-based fuel and steam.

<sup>3</sup> Reflects the impact of the divestiture of Wheelabrator.

<sup>4</sup> Numbers reflect both "Lands for Learning" projects and specific habitat sites.

# Recognition for Doing What's Right

**World's  
Most Ethical  
Companies**

**9 Consecutive Years**  
The Ethisphere Institute

**Dow Jones  
Sustainability  
Index**

**13 of the Past 14 Years**  
DJSI North American Indices

**S&P 500  
Climate  
Disclosure  
Leadership  
Index**

**GHG Reporting Since 2004**  
CDP (formerly Carbon Disclosure Project)

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



## Corporate Sustainability

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



## Environmental

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



## Workplace Recognition

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



## Community

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

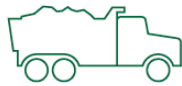


## Business Recognition

- » Supplier of the Year Services Award, BASF 2015
- » Recycler of the Year Business Category, MassRecycle 2015
- » Supplier Leadership Award, Sustainable Purchasing Leadership Council 2016

# Waste Management's Sustainable Services At-A-Glance

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



Founded in  
**1997**



**>400**  
Professionals

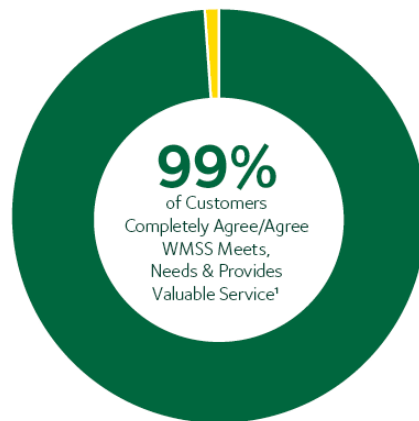
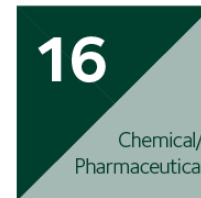


**\$165M+**  
Customer Cost Savings  
Since 2003

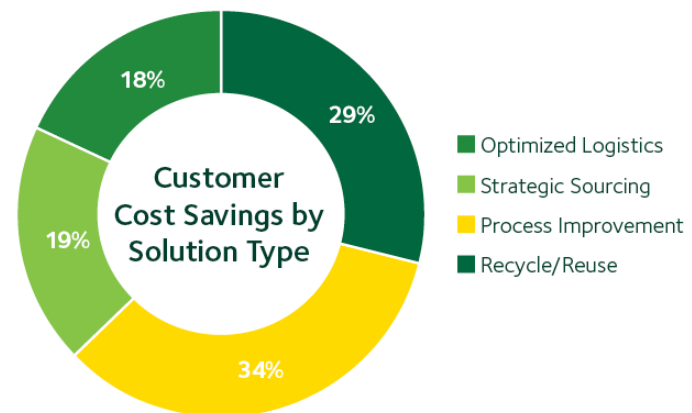


**\$12.4M**  
saved in 2015

**141** Programs, including



<sup>1</sup> 2015 survey of 180 customers



# Helping Our Customers Reach Their Sustainability Goals

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

## Heavy Equipment Manufacturers

Achieved \$2 million+ in 2015 cost savings.

**\$2 million+**

## Regional Hospital

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

**4,280**  
pounds diverted

## Global Retailer

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

## Automotive Manufacturer

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

**70%**  
reduction

## Chemical Manufacturer

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

**\$14 million**

## Oil Company

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

**\$4.3 million**

## Sporting Venue

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

**82**  
metric ton  
reduction

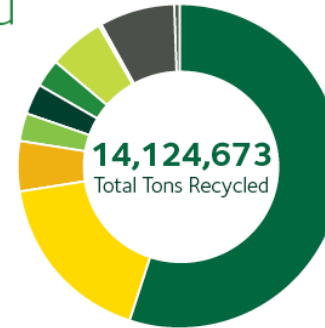
# Our Recycling Impact in 2015

## What We Recycled

### Waste Management Recycling Mix 2015

Material: Tons

<span style="color: #006400;">■</span> Paper <b>7,791,905</b>	<span style="color: #006400;">■</span> Plastics <b>408,489</b>
<span style="color: #FFD700;">■</span> Mixed Organics <b>2,468,740</b>	<span style="color: #FFD700;">■</span> Mixed Recyclables <b>774,390</b>
<span style="color: #FF8C00;">■</span> Glass <b>703,495</b>	<span style="color: #A9A9A9;">■</span> E-Waste/Lamps <b>16,118</b>
<span style="color: #90EE90;">■</span> C&D/Wood <b>397,799</b>	<span style="color: #404040;">■</span> Fly Ash <b>1,062,203</b>
<span style="color: #000000;">■</span> Metals <b>428,576</b>	<span style="color: #000000;">■</span> Other <b>72,958</b>



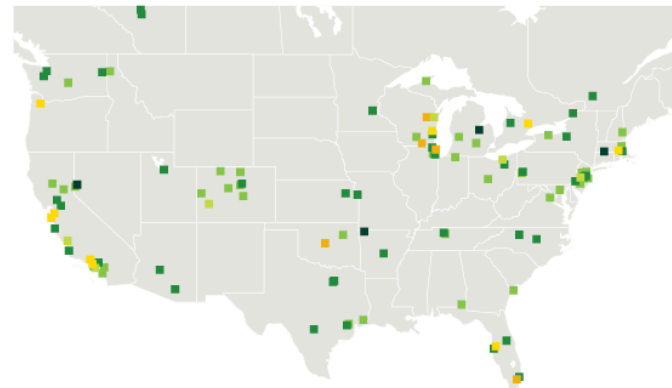
## Why We Recycled



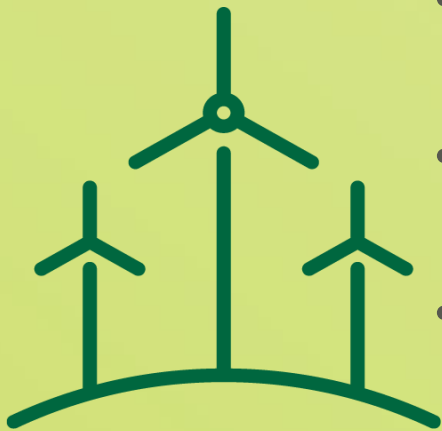
## Where We Recycled

### Material Recovery Facilities (MRFs)

<span style="color: #006400;">■</span> 43 Single Stream	<span style="color: #FF8C00;">■</span> 6 High Grade
<span style="color: #000000;">■</span> 4 Dual Stream	<span style="color: #90EE90;">■</span> 6 Other
<span style="color: #90EE90;">■</span> 37 Paper Only or Other Commercial Materials	
<span style="color: #FFD700;">■</span> 8 Construction and Demolition Debris	



# Minimizing Our Energy and GHG Footprint



- Deploying wind- and solar-driven landfill gas control devices and leachate extraction pumps
- Producing landfill gas on-site for use in nearby facilities
- Using waste heat to power other devices on-site to evaporate leachate and heat buildings
- Utilizing variable frequency drives to reduce electricity use, reducing our parasitic load and increasing the amount of renewable energy we deliver to the grid
- Conducting energy efficiency audits to identify potential energy savings

# Optimizing Our On-Road Fleet

## GOAL

**15%**

Reduction in on-road  
fleet emissions over 2007 baseline

## PROGRESS

**24%**

Reduction in on-road  
fleet emissions through 2015

## 2015 Natural Gas Transportation



**32,000**

total collection and  
support vehicles



**18,500**

collection  
vehicles



**5,021**

natural gas  
vehicles



**1 billion**

investment in  
natural gas  
transportation



# Safety: Our Promise to Each Other

## Safety Vision Statement

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



### Leadership to:

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



### Employees to:

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

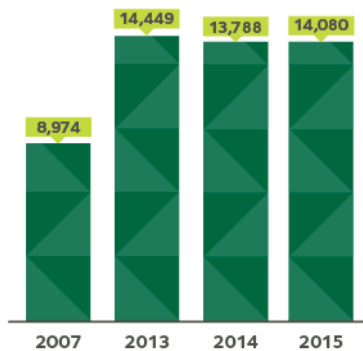
# A Continuing Commitment

## Total Recordable Injury Rate (TRIR)



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

## Vehicle Accident Recordable Rate (VARR)



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

## Days Away Restricted or Transferred (DART)



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

# Bringing Value to the Communities We Serve

## Vision

To be a trusted and valued community partner.

## Mission

Preserving the environment and increasing the environmental services we provide through the cultivation of goodwill, education, open communication and the development of strategic relationships with the communities where we operate, serve or want to serve.

## Community Outreach Focus Areas

### Environment



25K acres

protected for wildlife habitat



110

wildlife habitat programs



78

"Wildlife at Work" programs



2

Corporate Lands for Learning programs



15

combined "Wildlife at Work"/Corporate Lands for Learning programs

### Community Vitality



\$12 million

program total charitable contributions (cash and in-kind donations)



200K people,

including K-12 youth and college students, participating in environmental stewardship and community betterment activities



>4,000

Waste Management-hosted and/or participated community events

Waste Management Monthly Diversion Report  
Sandy City

**YEAR TO DATE DIVERSION REPORT - 2017**

Diversion Tons													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
MSW	2157.2	1990.6	2706.9	3057.1	4090.7	3462.3	3208.4						20673.2
Recycle	547.8	417.8	494.0	444.3	579.6	457.1	464.1						3404.7
Glass	12.6	10.8	13.4	11.8	9.9	10.4	14.1						83.0
Green Waste (Brush)	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0
Recycling Goal	543.5	483.8	642.9	702.6	936.0	786.0	737.3						4832.2
Total Recycle (RCY & Glass)	560.4	428.6	507.4	456.1	589.5	467.5	478.2	0.0	0.0	0.0	0.0	0.0	3487.7
Total Combined (MSW & RCY)	2717.6	2408.4	3200.9	3501.4	4670.3	3919.4	3672.5	0.0	0.0	0.0	0.0	0.0	24090.5
Diversion % (Includes RCY & Glass)	20.16%	17.35%	15.43%	12.69%	12.41%	11.66%	12.64%	0.00%	0.00%	0.00%	0.00%	0.00%	14.13%

Waste Management Monthly Diversion Report  
**Sandy City**

**YEAR TO DATE DIVERSION REPORT - 2016**

Diversion Tons													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
MSW	1959.2	1997.3	2739.3	3032.5	3937.1	3501.0	3066.5	3275.8	3009.2	2830.7	3299.8	2247.2	34895.6
Recycle	455.1	516.9	489.9	484.5	602.0	439.4	436.3	459.8	372.3	510.8	494.1	578.5	5839.6
Glass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	12.0	21.2
Green Waste (Brush)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.2	19.2
Recycling Goal	1207.2	1257.1	1614.6	1758.5	2269.6	1970.2	1751.4	1867.8	1690.7	1670.8	1901.5	1412.9	20372.2
Total Recycle (RCY & Glass)	455.1	516.9	489.9	484.5	602.0	439.4	436.3	459.8	372.3	510.8	503.3	590.5	5860.7
Total Combined (MSW & RCY)	2414.3	2514.2	3229.2	3517.0	4539.1	3940.4	3502.8	3735.6	3381.5	3341.5	3803.1	2856.9	40775.5
Diversion % (Includes RCY & Glass)	18.85%	20.56%	15.17%	13.78%	13.26%	11.15%	12.45%	12.31%	11.01%	15.29%	13.23%	20.67%	14.37%



Always recycle:



Empty Plastic Bottles & Containers



Empty Food & Beverage Cans



Flattened Cardboard & Paperboard



Clean Paper

Do NOT put in your recycling cart:



NO Food or Liquids



NO Plastic Bags  
Do not bag recyclables.



NO Clothes or Bedding



NO Glass

[RecycleOftenRecycleRight.com](http://RecycleOftenRecycleRight.com)

2017



WHY recycle?

Plastic bottles  
can turn into clothing

Aluminum cans  
can turn into new ones in 60 days

Today's news  
can become a new cereal box

How to recycle:

Recycle all bottles, cans  
and paper

Keep items clean and dry

No plastic bags



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Always recycle:



Plastic Bottles & Containers



Food & Beverage Cans



Paper



Cardboard & Paperboard

Do NOT include in your recycling cart:



NO Food Waste



NO Plastic Bags & Film



NO Foam Cups & Containers



NO Needles

To Learn More Visit:  
[RecycleOftenRecycleRight.com](http://RecycleOftenRecycleRight.com)

#RORR



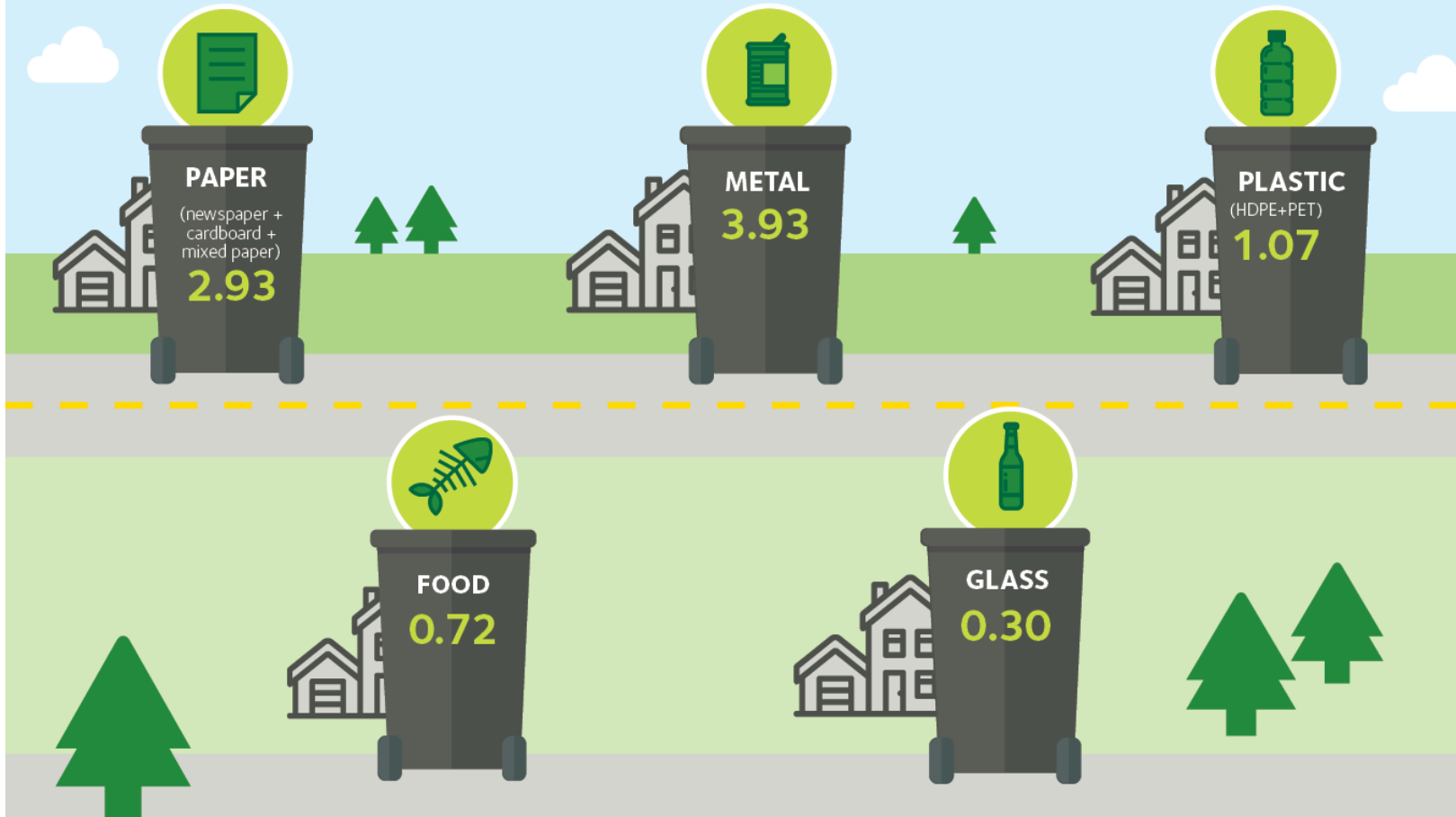
## Free Online Resources

### RecycleOftenRecycleRight.com

- Pledge
- K-5 curriculum
- Recycle posters, guides
- Myth Busters
- News Articles
- Videos
- Art Projects for Kids

# GHG Emissions Reduction

## GHG Emissions Reductions Per Ton of Material Recycled (in MtCO<sub>2</sub>e)







# PGA TOUR Overview

## The PGA TOUR's Largest — and Greenest — Golf Tournament

Water restored to the Colorado River Basin and Verde River through the WMPO Water Campaign

**35 million gals.**

Fencing, carpet, turf and banners donated for reuse

**25,000 lbs.**

Unused food donated to local nonprofits

**30,000 lbs.**

Electricity supplied from renewable sources

**100%**

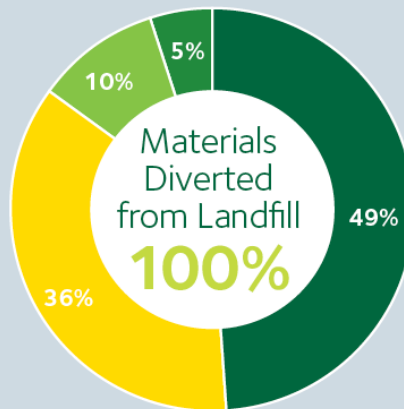


Recovered waste per attendee

**1.8 lbs.**

Attendees

**>560,000**



■ Recycled    ■ Waste-to-Energy  
■ Composted    ■ Donated

Total GHG emissions avoided from recycling, composting and waste-to-energy

**350 metric tons**

Total charitable donations

**>\$9 million**

Metered water used per attendee

**11 oz.**

Graywater re-used in portable toilets

**6,100 gals.**

