

2009 Solid Waste Reduction and Recycling Statistics

To measure Ohio's progress toward achieving the solid waste reduction/recycling goals, Ohio EPA annually calculates and publishes solid waste reduction and recycling rates for Ohio's 52 *solid waste management districts* (SWMDs) and for Ohio as a whole.

Ohio EPA tracks solid waste reduction/recycling according to two sectors of solid waste generators – the residential and commercial sector (R/C sector) and the industrial sector. The solid waste generated by the R/C sector essentially is municipal solid waste. Industrial solid waste is generated by manufacturing operations.

Ohio's Recycling Goals

The state solid waste management plan establishes Ohio's recycling goals. The current state plan is the *2009 State Solid Waste Management Plan*. The overriding goal in the plan is for Ohio to reduce/recycle at least 50 percent of the solid waste generated statewide.

The plan establishes nine goals for the SWMDs. The primary goals are Goal 1 and Goal 2. Goal 1 establishes standards for recycling infrastructure. Goal 2, known as the percentage goal, establishes a solid waste reduction and recycling rate (WRR). SWMDs may select which of these two goals to achieve.

SWMDs that opt to pursue the infrastructure goal must demonstrate that at least 90 percent of the residential population in each county in the SWMD has access to recycling infrastructure, mainly curbside and drop-off programs.

SWMDs that choose to pursue Goal 2, detailed in this fact sheet, strive to reduce/recycle:

- at least 25 percent of R/C sector solid waste generated within the SWMD; and
- at least 66 percent of industrial solid waste generated within the SWMD.

2009 Fast Facts

Ohio's Reduction/Recycling Goals

- Residential/Commercial – 25 percent
- Industrial – 66 percent
- Total – 50 percent

Residential/Commercial Waste Reduction and Recycling Rate

- *Weight* – 3.31 million tons
- *Percent of Generation* – 25 percent

Industrial Waste Reduction and Recycling Rate

- *Weight* – 8.87 million tons
- *Percent of Generation* – 56 percent

Statewide Waste Reduction and Recycling Rate

- *Weight* – 12.18 million tons
- *Percent of Generation* – 42 percent

The WRR goal measures diversion from landfills, not just recycling. Thus, composted yard waste contributes to achieving the goal as does volume reduction achieved through waste-to-energy processes, solid waste incineration and mixed solid waste composting.

Reporting and Surveying

Each SWMD must submit an annual district report to Ohio EPA that details the quantities of materials reduced/recycled.

SWMDs obtain data for the annual report by surveying communities, businesses, industries and other entities that recycle. Completing and returning these surveys is strictly voluntary, so obtaining accurate, complete data is often a challenge for the SWMD.

In addition to the typical factors that affect the accuracy of data from surveys, the completeness of statewide data is affected by Ohio's dual reduction/recycling goals. Some SWMDs that opt to pursue Goal 1 may dedicate limited time and resources to gathering and analyzing data. This is an anticipated result of having two goals.

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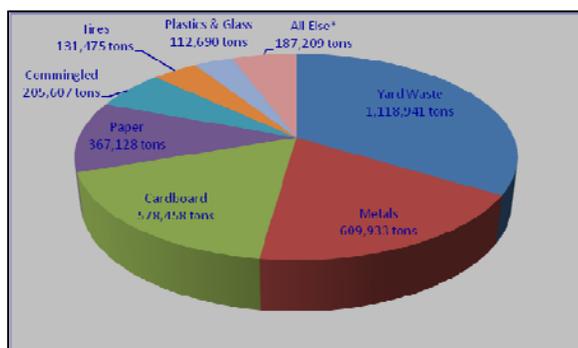
Residential/Commercial Sector

Statewide, SWMDs reported that 25 percent, or 3,311,440 tons, of all R/C sector solid waste was reduced/recycled.

Types of Materials Reduced/Recycled

As shown in Figure 1, a small number of materials comprised the majority of R/C sector solid waste reduced/recycled.

Figure 1: Residential/Commercial Solid Wastes Reduced and Recycled in 2009



*Includes wood, white goods, textiles, used oil, food, lead-acid batteries, electronics, household hazardous waste, household batteries, household batteries and rubber.

In 2009, the top five materials by weight and percent of total were:

- yard waste – 1,118,941 tons (34 percent);
- ferrous metals – 609,933 tons (18 percent);
- corrugated cardboard - 578,458 tons (17 percent);
- all other paper – 367,128 tons (11 percent); and
- co-mingled materials – 205,607 tons (6 percent).

These five materials made up approximately 87 percent of all R/C sector solid waste reduced/recycled in 2009.

Industrial Sector

Statewide, SWMDs collectively reported that 56 percent, or 8,871,115 tons, of all industrial-sector solid waste was reduced/recycled.

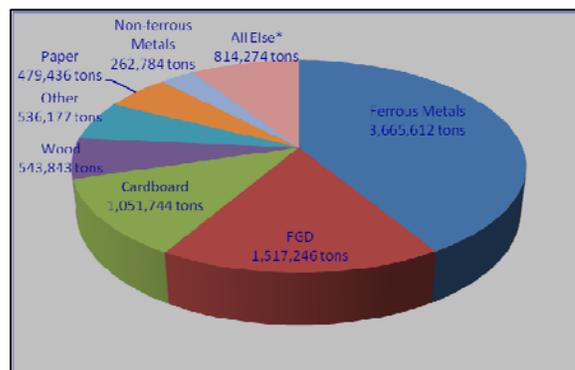
Types of Materials Recycled

As with sector solid waste, the majority of the industrial sector solid waste reduced/recycled consisted of a small number of materials. In fact, three materials – ferrous metals, flue gas desulfurization waste (FGD) and cardboard - made up 70 percent of all industrial solid waste reduced/recycled.

As shown in Figure 2, in 2009, the top five materials by weight and percent of total (excluding other) were:

- ferrous metals – 3,664,612 tons (41 percent);
- FGD – 1,517,246 (17 percent);
- cardboard – 1,051,744 tons (12 percent);
- wood – 543,813 tons (6 percent); and
- all other paper – 479,436 tons (5 percent).

Figure 2: Industrial Solid Wastes Reduced and Recycled in 2009



* Includes food, plastic, glass, foundry sand, other metals and other misc materials.

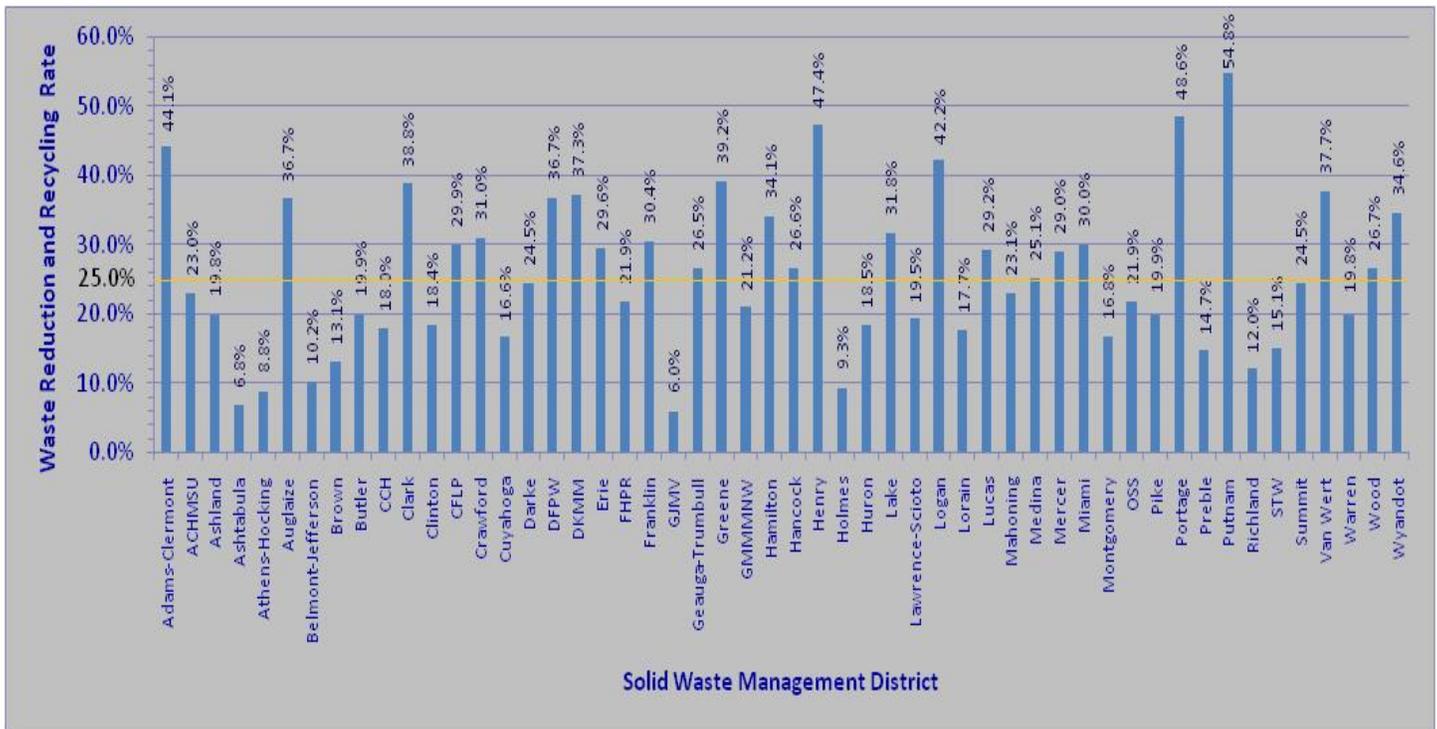
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Solid Waste Reduction/Recycling Rates for the 52 SWMDs

As shown in Figure 3, R/C sector recycling rates in 2009 varied widely among SWMDs, from a low of 6 percent to a high of 54.8 percent. Twenty-five SWMDs reported having recycled enough material to achieve Ohio's R/C sector WRR goal of 25 percent.

Industrial recycling/reduction rates also varied significantly in 2009. As shown in Figure 4 on the next page, the rates achieved by the SWMDs ranged from a low of 0.8 percent to a high of 99.3 percent. Forty-two SWMDs reported having recycled enough industrial material to achieve Ohio's WRR goal of 66 percent.

Figure 3: 2009 Residential/Commercial Solid Waste Reduction and Recycling Rates by SWMD



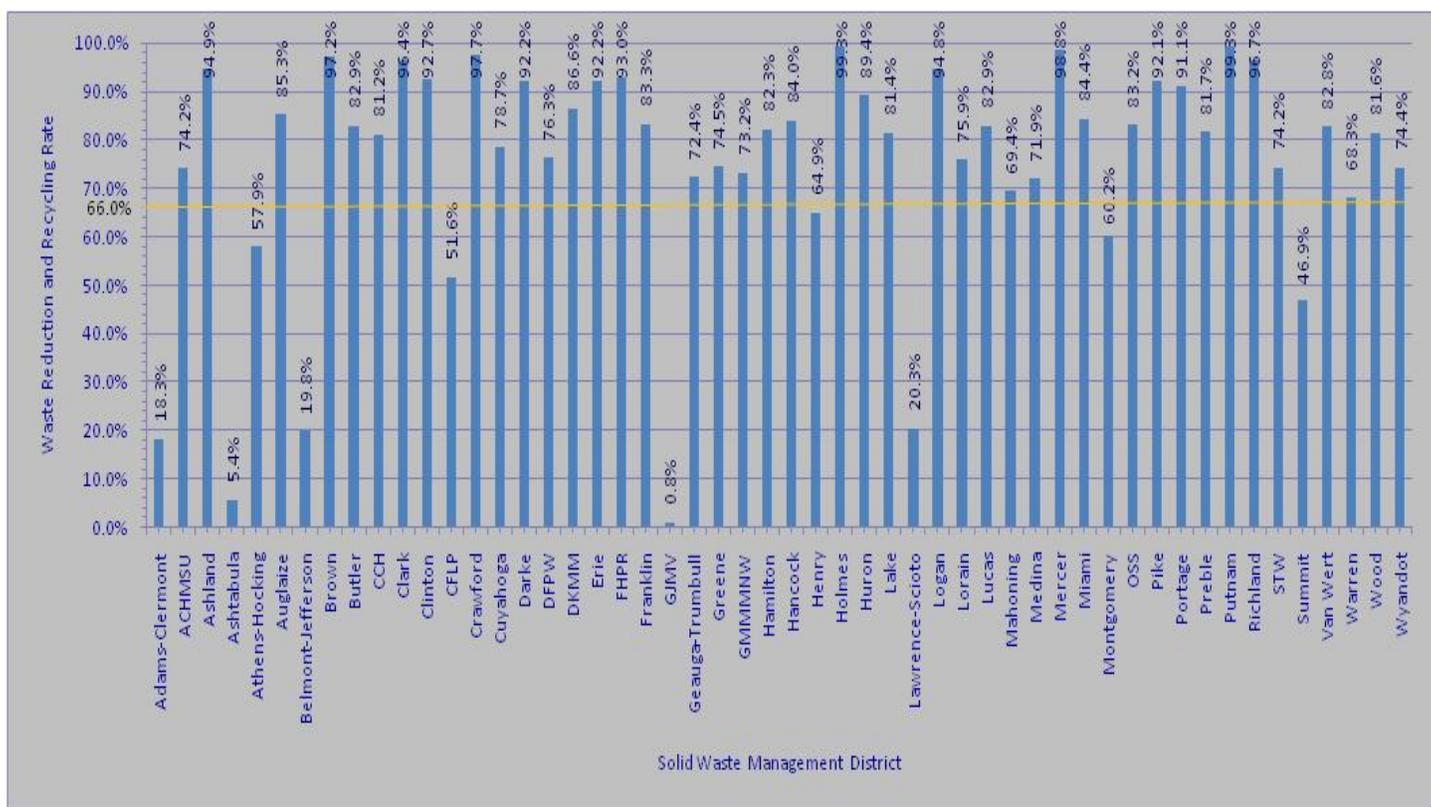
KEY

ACHMSU = Allen-Champaign-Hardin-Madison-Shelby-Union
CCH = Carroll-Columbiana-Harrison
CFLP = Coshocton-Fairfield-Licking-Perry
DFPW = Defiance-Fulton-Paulding-Williams
DKMM = Delaware-Knox-Marion-Morrow

FHPR = Fayette-Highland-Pickaway-Ross
GJMV = Gallia-Jackson-Meigs-Vinton
GMMMMNW = Guernsey-Monroe-Morgan-Muskingum-Noble-Washington
OSS = Ottawa, Sandusky-Seneca
STW = Stark-Tuscarawas-Wayne

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Figure 4: 2009 Industrial Solid Waste Reduction and Recycling Rates by SWMD



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The Adams-Clermont; Coshocton-Fairfield-Licking-Perry; and Gallia-Jackson-Meigs-Vinton SWMDs all had reduction/recycling rates below the 66 percent goal.

All three SWMDs also have coal burning power plants within their service areas. These plants produce significant quantities of FGD. This FGD is solid waste; is difficult to recycle; and is primarily disposed of in landfills. Consequently, a power plant has a significant negative effect on the host SWMD's ability to meet the industrial percentage goal.

For More Information

Solid waste management information is available on DSIWM's [SWMD webpage](#), or you may contact the Division directly.

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