

March 2008

Solid Waste Recycling and Reduction in Ohio - 2005

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. These figures are important for gauging the progress Ohio is making toward achieving the state's recycling and waste reduction goals.

Ohio EPA tracks solid waste recycling and reduction according to two sectors: the residential and commercial (R/C) sector and the industrial sector. The statewide waste reduction and recycling rate is calculated by adding together the generation figures for both sectors.

Ohio's Recycling Goals

Ohio's recycling goals are established in the state solid waste management plan. The current plan, adopted in 2001, has a goal of reducing and/or recycling at least 50 percent of the solid waste generated in Ohio by 2005. To help achieve that goal, the plan gives SWMDs the

option of pursuing a quantitative goal or a goal focused on providing access to recycling opportunities.

A SWMD that chooses to provide access to recycling opportunities must demonstrate that at least 90 percent of the residential population in each county that makes up the SWMD has access to recycling opportunities, mainly curbside and drop-off programs. SWMDs who choose the quantitative or "percentage" goal strive to recycle or reduce at least 25 percent of their R/C solid waste and at least 66 percent of their industrial solid waste. Thus, yard waste that is composted contributes to achieving the goal, as does volume reduction achieved through incineration and mixed waste composting.

Who Is Recycling?

Reported R/C recycling rates vary greatly among SWMDs, from a low of three percent (Lawrence-Scioto Joint SWMD) to a high of 46 percent (Mercer County SWMD). In 2005, five SWMDs had an R/C recycling rate of less than 10 percent and 26 had a rate between 10 and 25 percent. The remaining 21 SWMDs achieved a rate of more than 25 percent.

Another way to compare the numbers is by region.



The northwest, southwest and central regions of Ohio had the highest recycling rates at more than 24 percent. The northeast region came next, at 19 percent, followed by the southeast region at 10 percent. Interestingly, when compared with Ohio's current landfill capacity, it is notable that the southeast region also has the most landfill capacity remaining.

Industrial recycling rates also vary by SWMD. In 2005, the lowest was 2 percent, while the two counties with the highest industrial waste rates reported more than 95 percent. Eight SWMDs reported zero to 50 percent industrial waste recycled; 11 fell between 50 and 75 percent; and 33 SWMDs reported an industrial recycling rate of more than 75 percent.

What Are We Recycling?

In 2005, SWMDs reported recycling 3.74 million tons (25 percent) of R/C waste and 9.47 million tons (56 percent) of industrial waste, for a total of 13.2 million tons. This equates to an overall waste reduction and recycling rate of nearly 42 percent. By a wide margin, the material most widely recycled by the R/C sector was yard waste (1.3 million tons). The amount of yard waste diverted from landfills has increased by 181 percent since 1996. The recycling of commingled materials

2005 Fast Facts

Ohio's recycling/reduction goals:

Residential/Commercial - 25%
Industrial - 66%
Total - 50%

Residential/commercial waste reduction and recycling:

Weight - 3.74 million tons
Percent of generation - 25%

Industrial waste reduction and recycling:

Weight - 9.47 million tons
Percent of generation - 57%

Statewide waste reduction and recycling:

Weight - 3.22 million tons
Percent of generation - 42%

Curbside recycling programs:

Subscription - 111
Non-subscription - 404

Drop-off recycling programs:

1,289 sites



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and wood has increased over the past 10 years. On the other hand, some materials, such as appliances, food and source-separated glass and plastic have declined. The top five materials recycled (yard waste, paper, metals, wood and commingled) totaled 92 percent of all R/C waste recycled in 2005. All other materials recycled, including scrap tires, appliances, electronics and source-separated glass and plastic totaled less than eight percent.

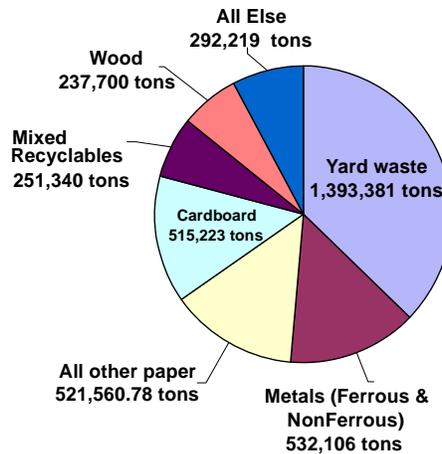
Ohio's industrial sector reported recycling 9.47 million tons of industrial waste in 2005. Nearly 50 percent of the recycled industrial material was ferrous metals, such as iron and steel. Waste classified as "other," such as FGD¹, asphalt/concrete, non-hazardous solid chemicals, organics/yard waste and stack solids make up the next largest category at 16 percent, followed by wood and paper, which are tied at almost 10 percent. Non-ferrous metals, such as aluminum, tin, copper or zinc, totaled five percent. All other industrial waste (rubber, glass, plastic, food and textiles) totaled less than 10 percent.

Residential Recycling Programs

In 2005, Ohio had 1,804 residential recycling programs throughout its 88 counties. Of these, 515 were curbside recycling programs, including 404 non-subscription and 111 subscription programs. An additional 1,289 programs were drop-off locations, of which 466 were full-time, serving urban communities of more than 5,000 people; 343 were full-time rural (less than 5,000 people). There were also 54 part-time (open less than 40 hours per week) urban drop-off locations and 231 part-time rural locations. The remaining 195 drop-offs were unspecified. The total reflects an unspecified number of small, private drop-off centers that may only collect one or two materials, rather than the

¹ FGD is the waste-product of flue gas desulfurization, a wet-scrubber technology for removing sulfur dioxide (SO₂) from the exhaust gas system of a coal-fired burner.

Types of Residential/Commercial Waste Recycled 2005



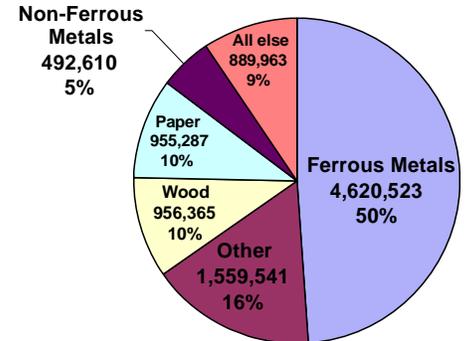
typical multi-stream collection site that collects paper (including office paper, newspaper and cardboard), aluminum, glass and plastic.

Industrial Recycling

Industrial recycling/reduction rates varied by SWMD in 2005, ranging from a low of two percent to a high of 99 percent (although it is likely that numbers are sometimes overstated due to double-counting and misclassification); more than two-thirds of Ohio's solid waste districts reported having recycled enough industrial material to achieve a recycling/reduction rate of 50 percent or more.

Several of the districts with very low industrial recycling rates are home to coal-burning power plants. Because the FGD¹ that is generated by these plants is considered to be solid waste and is difficult to recycle, a power plant has a significant negative effect on the host SWMD's ability to meet

Industrial Material Recycled



the industrial portion of the quantitative goal.

For More Information

Ohio EPA's Division of Solid and Infectious Waste Management (DSIWM) can answer many questions that you may have about solid waste generation and management or about solid waste planning in Ohio. Contact information is at the bottom of this page.

In addition, there are many fact sheets located at the bottom of this Web page: www.epa.state.oh.us/dsiwm/pages/swmdc.html

- Solid Waste Generation and Disposal
- Solid Waste Imports and Exports
- State Solid Waste Management Plan
- Summary of Solid Waste Management in Ohio - Recycling, Reduction, Waste Generation & Disposal
- Facility Data Report

Ohio Region	R/C Recycling Rate	Industrial Recycling Rate	Total Rate	Remaining Landfill Capacity (in years)
Central	26.08%	72.98%	47.61%	28.05
Northeast	19.39%	68.59%	42.10%	29.08
Northwest	24.21%	82.93%	58.21%	21.60
Southeast	10.05%	58.21%	30.85%	69.00
Southwest	25.38%	81.32%	46.43%	13.59