



State of Recycling In Arkansas—2001

Arkansas Department of Environmental Quality

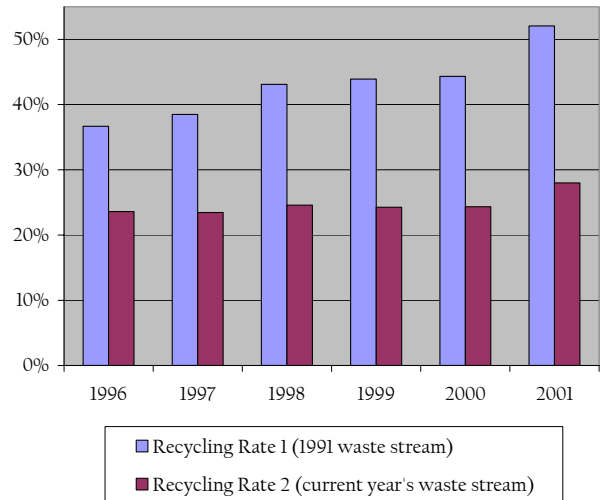
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State of Recycling In Arkansas - 2001

In 2001, Arkansans generated more than 3.6 million tons of solid waste, and officials struggled to find alternative methods for disposal rather than traditional landfilling. Recycling remained the alternative of choice with more than 28 percent of disposed waste being collected, marketed and returned back to consumers as useable products.

When comparing the 28 percent with previously reported figures, it looks as if recycling in Arkansas took a step backward. However, 2001 was the first year the recycling rate was calculated against the current year's waste stream and not that of the 1991 waste stream, the required benchmark for a decade. The new formula, required by Act 94 of 2000, offers a realistic view of recycling in Arkansas during the survey year. Arkansas' recycling rate actually continued to increase, approaching the national rate of 30.1 percent of the municipal waste stream.

Arkansas Recycling Rates



Challenges

Depressed markets for recyclables and the economic downturn for many industries presented some real challenges for recycling programs during the reporting period. Decreased revenues due to lower market prices and fewer tax dollars supporting recycling programs found many local elected officials scrambling to find ways to keep community-based recycling programs operating. Programs that developed because recycling is the right thing to do or operated as a free service suffered the most as communities made decisions to lay-

off employees, scale back operations, close facilities and send materials to landfills. With these programs, the challenge remains how to convince community officials that recycling is a utility and will always have a cost factor. On the other hand, there are recycling programs in the state that continue to thrive. Many are looking at ways to expand, including reuse operations, household chemical collection events and composting as a means to manage some of the 7.4 pounds of waste generated by each Arkansan every day.

New Goals

A decade has passed since the Arkansas Legislature first made it the policy of the State to encourage and promote recycling as a method of preserving landfill space and conserving natural resources and energy. During that time, Arkansas citizens surpassed goals to recycle 40 percent of the 1991 waste stream, and began moving toward new goals established during the 83rd General Assembly. Each year Arkansans rise to meet the challenge of reducing their solid waste stream, and 2001

was no different. While the total municipal solid waste stream increased about 2 percent, recycling increased more than 17 percent over the previous year.

As we work toward a new recycling goal of 45 percent by 2005, the State must continue existing recycling programs, increase public awareness programs and place a stronger emphasis upon the collection and marketing of recyclables from businesses and industries.

Cooperative Efforts

Cooperative efforts, always a part of recycling in Arkansas, are receiving renewed attention as recycling programs struggle to survive. Many traditional, government-run, community recycling programs are evolving into partnerships combining resources from a variety of entities. These partnerships are as diverse as the communities that pursue them, but the goal is to maximize resources while minimizing costs.

The ADEQ Recycling Section received a Jobs Through Recycling Grant from the U. S. Environmental Protection Agency that we hope will help develop more of these partnerships. Look for more information in next year's "State of Recycling in Arkansas."

Examples of cooperative efforts in Arkansas:

- ▶ Countywide or regional processing and marketing facilities
- ▶ Regional cooperative purchasing and marketing agreements
- ▶ Enlisting other agencies/organizations to help provide workers for facilities
- ▶ Partnerships between public entities (governments, schools, etc.) and private businesses
- ▶ Governments working with non-profits or schools to provide recycling for the whole community

ADEQ Recycling Activities

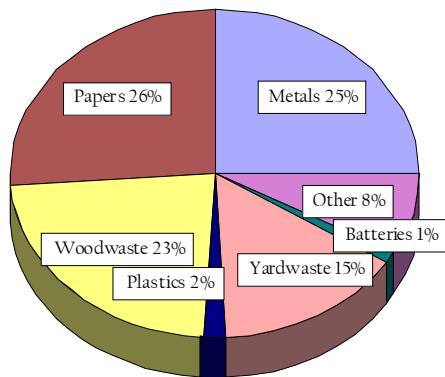
The ADEQ Solid Waste Management Division's Recycling Section offers general information, technical assistance and educational programs targeted at reducing the amount of waste going into landfills. As one might expect from the section name, the traditional focus has been starting and expanding recycling programs. This focus has widened in the last few years. The section now tries to incorporate complementary activities – such as reduction and reuse – into its recycling activities.

In 2001, recycling section staff responded to nearly 2300 requests for information or assistance, made 163 presentations reaching more than 6000 people, and produced or distributed more than 20 publications. This was in addition to administering the Recycling Grants program discussed below.

Other activities enhancing recycling in Arkansas were undertaken by the ADEQ Recycling Market Development Section, also part of the Solid Waste Management Division. Each year, this section targets a different waste for special attention. Waste oil was the focus for 2001, and section staff were successful in expanding the market for this commodity. The amount of waste oil recycled increased 91 percent, moving from 21,189 tons in 2000 to nearly 41,500 tons in 2001. Wood waste is targeted for 2002.

In addition, recycling market development staff administer the Recycling Equipment Tax Credit program, which helps Arkansas businesses, both large and small, invest in recycling. More than 100 companies have invested more than \$300 million, creating nearly 1500 jobs since the recycling tax credit program began ten years ago. In 2001, the section certified 45 tax credit applications totaling almost \$25 million.

2001 Recycling Rate



Recycling Grants To Communities

Seven hundred and sixty recycling grants have been awarded to communities over the past eight years. Nearly \$3 million was awarded in 2001, resulting in a total eight-year investment of more than \$19.7 million. Citizens, businesses, schools and industries in all 75 counties have the opportunity to reduce waste by making the choice to recycle at 186 public recycling centers. During these eight years, recycling has diverted more than 6.2 million tons of waste from Arkansas landfills - 4638 pounds for every Arkansan. In 2001, Arkansas

recycled 1,010,748 tons, saving more than \$30 million in landfill disposal costs and averaging 756 pounds per person recycled.

In 2001, the direct economic benefits from the recycling grants program continued to increase. Of the \$19.7 million granted since 1994, more than \$17.6 million has been expended with a direct economic benefit of nearly \$30.4 million to the citizens of Arkansas. For each dollar expended by the program, citizens have realized a direct return of \$1.73 and nearly 94 pounds of waste recycled.

Recycling's Environmental Benefits

Recycling provides a variety of environmental benefits that are rarely reported except in general statements such as "saves energy" and "reduces greenhouse gases." The National Recycling Coalition has provided an Environmental Benefits Calculator which allows users to quantify these environmental benefits. Using information specific to Arkansas provides the following results of recycling in 2001:

- ▶ **Energy Savings** due to recycling and remanufacture versus disposal and manufacturing from virgin materials amounted to 9,565,500 million Btus. That's more than 9 million Btus for every Arkansas household, approximately 9 percent of an average annual energy bill. Put another way, it's equivalent to saving 2,638 kilowatt hours, or approximately \$200, per household.
- ▶ **Greenhouse Gas Emissions** were reduced by 399,080 metric tons of carbon equivalent, a metric measure used to compare the emissions of different greenhouse gases based on their global warming potential. The increased temperature and changes in precipitation associated with global warming could have adverse effects on human health and the economy as well as many ecological systems.

- ▶ **Other Air Emissions and Waterborne Wastes** were also reduced. Air emissions (excluding greenhouse gases) were reduced by 659,395 tons. This includes gases such as sulfur oxides, which contribute to acid rain, and particulates, which contribute to ozone. Waterborne wastes, including ammonia and cyanide, were reduced by 2,455 tons.
- ▶ **Natural Resources** are conserved when recycled materials are used instead of virgin materials in the manufacturing process. For instance, the steel recycled in Arkansas saved 285,275 tons of iron ore; 159,754 tons of coal; and 13,693 tons of limestone. Arkansans also saved nearly 3.2 million trees by recycling paper products.

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Information presented in this document is from several sources. Arkansas specific data on waste generated and recycled, the Recycling Tax Credit program and the Recycling Grants program is collected as required by Arkansas Pollution Control and Ecology Commission Regulations 11, 14, 16, 22 and 28. National figures and generic information were provided by the U. S. Environmental Protection Agency.

Materials Recycled 2001

Material	Weight in tons
Antifreeze	113
Batteries	12,151
Cooking Oil	11,148
Glass	1,588
Metals	241,794
Aluminum Cans/Non-ferrous	12,345
Oil Filters	556
Steel Cans	1,230
White Goods/Ferrous	227,653
Motor Oil	40,500
Pallets and Other Wood Waste	237,838
Paper	267,414
Cardboard	185,902
Computer Printout	491
Magazines/Phone Books	502
Mixed	21,236
Newsprint	25,932
White Ledger	3,707
Other (hard white shavings, plastic coated, etc.)	29,644
Plastic	20,640
Agricultural Containers	216
Carpet Padding	9,630
HDPE (High Density Polyethylene)	2,013
LDPE (Low Density Polyethylene)	1,153
PET (Polyethylene Terephthalate)	1,067
Poly Pipe	3,072
Other	3,489
Textiles and Leather	831
Tires	10,990
Yard Waste	153,658
Other (Teflon, fluorescent lamps, etc.)	12,081
TOTAL 1,010,748	

2,598,804 tons landfilled in 2001

2,598,804 + 1,010,748 = 3,609,552 total municipal solid waste stream in 2001

1,010,748 / 3,609,495 = **28 percent recycling rate**