



# STATE OF RECYCLING IN ARKANSAS—2015

Arkansas Department of Environmental Quality

November 2015

## Recycling's New Normal

The basic concept of recycling—using waste materials to create something useful—goes back thousands of years. In fact, if you look at the natural world, you'll find recycling occurred long before humans walked the Earth.

For instance, green plants give off oxygen as a waste product of photosynthesis, and animals need oxygen for respiration. Animals give off carbon dioxide as a waste product of respiration, and green plants need carbon dioxide for photosynthesis. One organism's waste is another's resource.

While the basic idea has remained the same, recycling has changed throughout its history. Prices received for specific materials rise and fall. Markets for new materials open as technologies evolve. Issues are resolved and new concerns arise as innovation changes how we meet our wants and needs. If recycling centers want to survive, they need to adapt to those changes.

So, what are recycling facilities currently trying to adapt to? Most industry experts point to several factors influencing recycling today.

### The Evolving Ton

Think back 10 or 20 years. Did you subscribe to a newspaper? How

many of your neighbors subscribed? How thick were the papers? How much bottled water did you drink? What other drinks did you have in the house and how were they packaged? How thick were the containers? What did your cell phone (if you had one) look like and what could it do?

These questions hint at the description of the evolving ton. It's the change in the waste stream due to changes in technology and lifestyles. The evolving ton involves less paper, especially newspaper and other printing papers; more plastic; and fewer, usually smaller, electronics. The black trendlines in the chart below shows that the first two apply to recycling in Arkansas.

The number of tons of recycled electronics is also

on a downward trend in Arkansas. This is due, at least in part, to multifunction gadgets like smart phones and other changes in technology, such as flat-screen televisions and computer monitors. In other words, the old equipment we recycled in the early years weighed more than the newer equipment we are recycling now.

And, it's not just electronics. Everything from glass to plastic seems to be getting thinner and lighter. Think about how easy it is to crush an aluminum can or tear a paper bag today compared to 10 years ago.

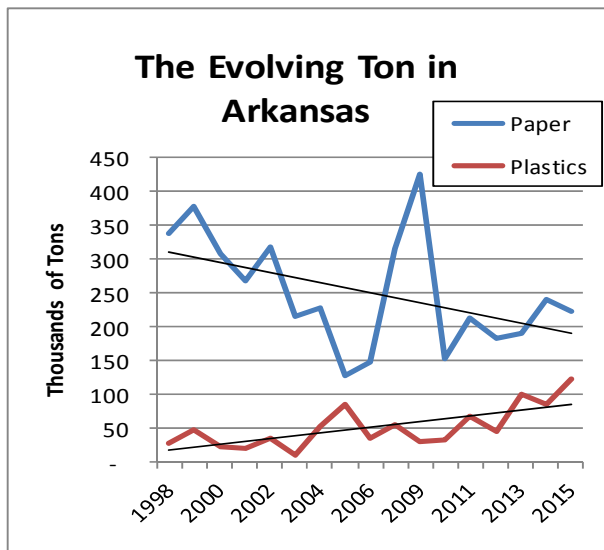
Therefore, recycling facilities need to continually collect more materials to generate the same tonnage as in  
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## 2015 Numbers

- ◆ Tons of material sent to landfills saw a 4 percent increase over last year.
- ◆ Tons of material recycled saw a 36 percent increase over last year.
- ◆ This year's recycling rate is 45.5 percent. That's a 17 percent increase compared to last year's 39 percent.
- ◆ That rate means we recycled nearly half of the waste we generated.
- ◆ See page 3 for more details.

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previous years. This is important because materials are sold by weight.

**Commodity Pricing**

Collecting the same tonnage would be okay if costs and pricing remained the same or improved. However, costs tend to increase over the years. Fortunately, so did pricing, at least until the economic slowdown a few years back. While prices recovered from the downturn's low, they are falling once more and may never again reach the heights they did in the past.

There are a number of reasons for this, but most go back to the demand for recovered materials. Demand for these materials is down domestically and globally.

Domestically, demand for certain materials has been declining for years as manufacturing moved overseas and factories in the U.S. shut down. One exception was plastic. Now, however, the demand for plastic is falling due to the drop in oil prices. When the price of oil is low, manufacturers may find virgin materials are less expensive to use than recycled plastic.

Demand for recycled materials is also down worldwide. Much of this is due to decreased demand from China. Until a few years ago, China took nearly all the recyclables we could send. As China's economy slows, so does its need for raw materials. Therefore, China can reject bales of recycled materials that don't meet quality standards.

**Contamination**

Contamination is when non-recyclable items, such as food waste or diapers, are included in a bale of recyclables. It can also mean that a recyclable item is included in a bale of another recyclable item. For instance, recyclable plastic bottles in a bale of paper are considered contamination.

Buyers determine how much contamination is acceptable in a bale of recycled materials. For a time, China put up with a lot of contamination to get the raw materials it needed. When some bales held more contaminants than useable recyclables, China started enforcing strict quality measures and rejected entire shipping containers of materials.

Contamination is also a problem for recycling facilities in the U.S. If facilities receive materials they can't sell, they must dispose of those materials, usually in a landfill. The costs of removing these items from the recyclables and the fees to dispose of them eat into any profits recycling facilities may make.

Even worse, some of these items, such as plastic bags and films, can jam equipment. This causes downtime, cutting profits even further.

**The End Result**

In the best of times, recycling revenues can cover the costs of recycling. These are not the best of times. Many recycling

facilities, especially smaller programs run by municipalities, are struggling to survive.

Costs to run recycling programs are rising; more material must be collected to cover these costs; and few, if any, customers want to pay more to recycle.

**How to Help**

If recycling programs in Arkansas are to survive and thrive, each of us needs to do our part. After all, we purchase and use the products that generate the materials that can be recycled. Isn't recycling worth a little of our time and money?

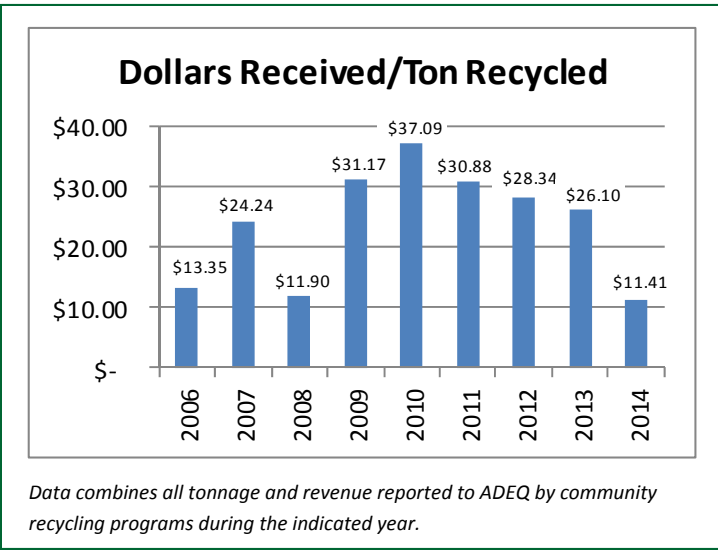
Things each of us can do:

1. Contact the municipality, nonprofit or company that collects your recycling. Find out what materials are accepted and how they need to be prepared (i.e., rinsed, flattened, etc.).
2. If you aren't sure if an item can be recycled in your program, ask the recycler or throw the item in the trash.
3. When you are shopping, look for items that are packaged in materials that can be recycled in your program.
4. Contact your local elected official and express your support for recycling. Offer to help explore ways to make the program more sustainable.
5. Thank your local recycling facility employees and other recyclers you meet for their efforts.

Recycling conserves resources, helps reduce greenhouse gases, and provides more jobs than landfilling. Where else do you get so much for so little?

Keep Arkansas Natural: Recycle!

IN THE BEST OF TIMES, RECYCLING REVENUE CAN COVER THE COSTS OF RECYCLING. THESE ARE NOT THE BEST OF TIMES.



## Materials Recycled 2015

Businesses reported on calendar year 2014; community programs reported on fiscal year 2015 (July 1, 2014—June 30, 2015).

Material	Weight in Tons	
Batteries	4,784	
Electronic Waste	4,347	
Glass	4,977	ARKANSAS ALSO
Household Hazardous Waste	877	RECLAIMED 40,257
Metals	2,266,736	TONS OF ROAD
Nonferrous—Aluminum, Brass, Copper	63,871	
Ferrous—Steel and Iron	2,201,789	MATERIAL; 104,629
Other (combined metals, steel slag, mixed metals, etc.)	1,076	
Oil (Motor, Cooking)	36,797	TONS OF ASPHALT;
Paper	222,868	25,090 TONS OF
Cardboard	133,455	
Magazines/Mixed	22,257	SHINGLES; 14,884
Newsprint	9,685	TONS OF TIRE-DERIVED
Sorted Office Paper & Sorted White Ledger	15,874	
Other (rolls of paper, consumer board, paper board, etc.)	41,597	FUEL; AND 430,606
Plastic	122,830	TONS OF WOOD WASTE
HDPE (high density polyethylene)	8,846	
LDPE (low density polyethylene)	17,937	FOR FUEL WHICH
PET (polyethylene terephthalate)	2,408	WERE NOT INCLUDED
Poly Pipe (polyethylene terephthalate)	85,273	
Other (poly logs, electronics plastics, chemical jugs, barrels, etc.)	8,366	IN THE LISTED TOTAL.
Textiles & Leather	1,097	
Tires & Rubber	7,205	
Yard Wastes	171,054	
<b>Total</b>	<b>2,843,572</b>	

Landfilled = 3,400,406 tons

Recycled = 2,843,572 tons

Total Waste Stream = 6,243,978 tons

**Recycling Rate =**  $\frac{\text{Recycled}}{\text{Waste Stream}} \times 100 = 45.5\%$



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## *New Recycling Logo For Arkansas*

In the summer of 2014, the Arkansas Department of Environmental Quality held a contest for a slogan to be used statewide to encourage people to recycle. More than 200 entries were received. The winner was selected by recycling professionals from throughout the state in a two-step evaluation process.

With the slogan in hand and input from the Recycling Branch, ADEQ graphic artist Diane Fowler designed a recycling logo for the state. The winning slogan and new logo were announced at an America Recycles Day



celebration on November 14 at ADEQ headquarters in North Little Rock.

The winning slogan—Keep Arkansas Natural: Recycle—was submitted by Tim Leigh of Conway. This slogan ties into the state's nickname (The Natural State) and all that it evokes. In addition, it points out that recycling is one way to preserve Arkansas's resources and beauty.

The logo is available for anyone to use to promote recycling in the state. A variety of images are accessible through the ADEQ website at [www.adeq.state.ar.us/poa/recycling/resources](http://www.adeq.state.ar.us/poa/recycling/resources).

## *Recycling Grants Update*

Act 1333 of 2013 changed the Recycling Grants Program into a distribution program. Act 1176 of 2015 did the same to the Arkansas Computer and Electronic Waste Recycling Grants Program. In addition, this act removed requirements for reporting on grants awarded before the program changes. Therefore, this is the last year we can report on these grant programs.

Nearly \$3.6 million was disbursed to the 18 regional solid waste management

districts through the Recycling Distribution Program in FY2015. More than \$2.3 million was disbursed through the FY2015 round of the Arkansas Computer and Electronic Waste Recycling Grants Program. A total of 82 grants were awarded. This was the last grant round for this program.

A third program, the Computer and Electronic Recycling Grants Program, remains a competitive grants program. In FY2015, three grantees—The City of

Texarkana, Ark.; eSCO Processing and Recycling, LLC; and Goodwill Industries of Arkansas—shared a total of \$200,000 through this program.



*An eSCO employee unloads a computer at a Pulaski County e-waste collection.*