

# LAND

## RECYCLING FACTS AND FIGURES

### DO YOU HAVE 2 MINUTES TODAY?

According to a recent study by the Environmental Protection Agency two minutes daily is the average time each household spends recycling. Your effort provides environmental benefits that can't be ignored.

## BE PART OF THE SOLUTION

Like all businesses, demand is the key factor to the success of recycling. Because recycling occurs only when a need for specific recyclable products exists, a market is critical. Until recyclables are returned to the marketplace and purchased in the form of new products, they haven't been recycled.

To recycle responsibly, buy products with a high percentage of post-consumer recycled content whenever possible.



### RECYCLING

- reduces consumer costs
- reduces air and water pollution
- diverts waste from the landfills
- reduces litter and illegal dumping
- converts waste into new, useful products
- reduces industry's impact on the environment
- conserves valuable energy and natural resources



Remember: No markets means no recycling. Close the recycling loop. **BUY RECYCLED.**

80% of our trash has the potential to be recycled. Adds up to 67 trash cans per person every year. See the back to learn more about the difference you can make for Oklahoma.

## PRE-THINK YOUR PURCHASES WITH PRECYCLING

Precycling is what you do by choosing products carefully before you purchase

- Select products with minimal wrapping packaged in recycled material.
- Avoid packages made from several layers of different materials which can't be separated, like juice boxes.
- Avoid individually packaged products
- Reuse paper or plastic bags. Better yet, carry your own reusable canvas or string shopping bag.
- Buy durable products rather than disposable items.
- Ask yourself: What will happen to a wrapping or container when I finish? Will this add to the problem? How long will this product last?
- Buy products that can be recharged or refilled.

## CONTAMINATION NIGHTMARES

The biggest headache in collecting recyclables is contamination. When it happens to our recycling collection the entire load often has to be landfilled, because the material has lost its value.


## WHAT IS CONTAMINATION?

Contamination occurs when recyclables are not prepared or disposed of properly. Please help control this serious problem by checking proper preparation procedures.

*Information provided by the Canadian County Solid Waste Disposal Authority*

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Recyclables and the resources needed	One person in one year throws out...	The fact is...	To prepare for recycling...	To recycle this material...	Recycled materials are used for...
<b>Glass jars and bottles</b> Materials needed to produce one ton: 1330 lb. sand, 433 lb. soda ash, 151lb. feldspar, 15.2 million BTU's of energy.	5 trash cans full of glass jars and bottles. Americans throw away enough glass bottles and jars every two weeks to fill the 1350 foot tower of the World Trade Center.	If you make a bottle from recycled glass instead of from scratch, you will save enough energy to light a lamp for 4 hours. The manufacturer of recycled glass versus raw materials reduces related air pollution by 20% and water pollution by 50%.	Rinse clean. Sort by color. Remove lids, caps, and metal rings. (No plate glass, mirrors, light bulbs, dishes, etc.)	The glass is crushed to make "cullet." It is run through a device that removes metal rings. A vacuum process removes plastic coatings and labels. The cullet is mixed with sand, limestone and soda ash and melted in a hot furnace to make new glass.	New containers, fiberglass, tile, pavement, reflective paint for road signs. Glass never wears out-it can be recycled forever!
<b>Aluminum beverage cans</b> Materials needed to produce one ton: 8766 lb. bauxite ore, 1020 lb. petroleum coke, 966 lb. soda ash, 327 lb. pitch, 238 lb. lime, 197 million BTU's of energy.	1 trash can full of aluminum. Approximately 25 empty cans equals one pound of aluminum. We throw away enough aluminum every three months to rebuild our entire commercial air fleet.	Recycling one can saves the energy equivalent to half a can of gas. Energy saved from each recycled can will light a 100 watt bulb for 3.5 hours. Making cans from recycled aluminum cuts related air pollution by 95%.	Should be relatively free of dirt and other contaminants. Smash to conserve space.	Cans are shredded and decorations are removed. The cans are then melted to make a sheet of pure aluminum.	New aluminum cans. Over half of aluminum cans are manufactured from recycled aluminum.
<b>NOTE:</b> Aluminum foil, pie plates, TV dinner trays, etc. are all reusable and recyclable. Be sure to rinse.					
<b>Steel "tin" food cans</b> Materials needed to produce one ton: 1.5 tons virgin iron ore, 700 lb. coal, 40 lb. limestone, 3-4 barrels oil. Tin cans are actually 99% steel, with a thin layer of tin added to prevent rusting.	5 trash cans full of food cans. Americans use approximately 100 million cans per day. We discard enough iron and steel to continuously supply all the nation's automakers.	Recycling one ton of steel saves one and one-half tons of iron ore and 3 to 4 barrels of oil. Increasing steel recycling 50% would save the energy equivalent of 7 nuclear power plants. Recycling scrap metal consumes 75% less energy than virgin ore.	Rinse, remove both ends and flatten with ends inside can. Labels okay. Most Oklahoma vendors do not accept aerosol cans. They have been known to explode and injure workers.	Cans are melted with iron ore in a blast furnace when new steel is being made. The tin coating is saved and used in making car parts. At least 70-80% of the can is saved when you recycle it. This cuts down mining waste and preserves a valuable resource.	New cans, cars, refrigerators, siding, tools, stainless steel, and many other things.
<b>Plastic drink containers (#1 and #2)</b> A basic "batter" called resin is derived from oil or natural gas. Plastic makers buy resin from chemical companies to make plastic products.	1 trash can full of plastic bottles and jugs. Americans use 2.5 million plastic bottles per hour. Each person uses 2.5 per day.	Recycling one ton saves the equivalent of over 1000 gallons of gasoline. The plastics industry uses 5 of the 6 most hazardous chemicals on EPA's list.	Important to remove the lids and rings. These can contaminate an entire load of plastic. Rinse, clean, and stomp bottles. It's especially important for milk jugs to be clean.	The bottles are shredded into flakes. The flakes are cleaned, dried, remelted and formed into tiny pellets. The pellets are remanufactured into new plastic products.	Stuffing material, filters, handles, paint brush bristles, plastic lumber, insulation, carpet, more drinking bottles, recycling bins, trash cans, clothing, etc.
<b>NOTES:</b> • Plastic bags are among the few plastic products that can be recycled in a closed loop - i.e. recycled plastic bags are made into more plastic bags. Check with retail markets and dry cleaners for collection. Polystyrene aka "Styrofoam" is not currently recyclable in Oklahoma.					
<b>All paper</b> Materials needed to produce one ton of paper packaging: 3688 lb. wood, 260 lb. salt cake, 24,000 gal. water, 216 lb. lime, 76 lb. soda ash, 28 million BTU's of energy.	25 trash cans full of paper (35.6% of all solid waste.) Americans use over 60 million tons per year or 960 million trees. We only recycle around 30% of it.	Printing the Sunday edition of a large city newspaper on recycled paper saves more than 10,000 trees every Sunday. One Sunday edition of the New York Times on recycled paper saves 75,000 trees.	All paper must be clean and dry. Contaminants include food, food residue, plastic, Styrofoam, tissue, paper cups, napkins, and paper plates.	The ink is removed through a special washing process. The paper is mashed into pulp, mixed with new pulp made from logs, and used to make paper. Paper can be recycled up to 7 times depending on fiber length.	Newsprint, boxes, insulation, wall board, cat litter, egg cartons, cardboard trays, tissue, writing paper, game boards, puzzles, cellulose, office supplies, gift bags. High grade paper is remanufactured into high grade paper.
<b>Used motor oil</b> It takes 42 gal. of high quality crude oil to produce 2.5 qts. of motor oil. It takes only one gallon of waste oil to produce the same amount.	Americans throw away enough used motor oil every year to fill 120 supertankers. Do-it-yourselfers release more used motor oil every 2.5 weeks than the total amount of the Exxon Valdez oil spill. 80% plus of DIY improperly handle & dispose used oil, pesticides and insecticides.	Used motor oil is a hazardous waste. Recycling saves the leftover oil and keeps it out of incinerators and landfills. A gallon of motor oil can pollute 1,000,000 gallons of water. Avoid getting it on the ground. It will leak into the groundwater or wash into rivers and streams via storm drains.	Pour into clean, leak-proof container. Do not mix with other substances. There are several oil recycling kits on the market.	The oil is taken to an oil refinery and refined again. It never wears out, but picks up heavy metals that have to be removed.	New motor oil can be burned for fuel in heaters without the refinement process. Refined motor oil is as good as new.