

# Recycling Starts With You

## ***What is Recycling?***

*Recycling is reusing the material in something to make something else.*

Recycling is a way of turning old stuff into new stuff, of changing used household materials we throw away into new products we buy and use.

Lots of things we consider trash can be reprocessed into new products and used again: plastic bottles, newspapers, soft drink cans, jelly jars and many more. Recycling is collecting, reprocessing, marketing and using these materials. Making new plastic containers from old plastic bottles is a good example of recycling. Plastic containers can also be turned into stuffing for pillows, or made into car dashboards. Recycling turns discarded items into products – again and again and again.

The City of Houston encourages recycling.

The City of Houston wants Houstonians of all ages to recycle. Houston encourages recycling because it helps clean up the environment and saves energy and valuable natural resources.

## ***Why Recycle?***

Because recycling makes sense!

*To slow down the rate at which we use landfills; to conserve natural resources; and to reduce manufacturing pollutants and save energy.*

When we throw things into the trash, we add to the amount of material going into landfills. By recycling items, we keep these materials out of landfills. The more trash we can keep out of the nation's landfills, the longer we can make them last.

Recycling is important as a way to save energy, too. For example, recycling aluminum takes only 5% of the energy needed to make aluminum from raw materials. Recycling an aluminum can saves enough electricity to operate a TV for three hours.

Most people agree that conserving natural resources, energy, and our land is the right thing to do - and recycling saves all of these!

*Each year Texans create enough waste to fill two lanes of I-10 from Beaumont to El Paso ten feet high.*

When you throw out your trash, do you ever stop to think who will take care of it or where it goes? Since we don't see piles of paper, glass, cans or plastic outside our front doors, most of us never have to worry about how to get rid of it. Yet we create much more trash than our country can easily handle. Every day Americans throw out enough trash to fill 63,000 garbage trucks.

*The average American produces 100 garbage cans full of garbage every year.*

On average, each of us produces more than 1,000 pounds of trash a year. Every three months we throw away enough aluminum to rebuild every plane in every airline in America. Each year we throw away the equivalent of 30 million trees in newspapers.

*Houstonians make enough trash to fill the Williams Tower in only five months.*

Getting rid of all this trash is a problem, and every day the problem of what to do with it grows bigger.

*61% of the country's solid waste is dumped in landfills.*

Most of the trash gets hauled away to landfills where it's buried. To build a landfill, a huge hole is dug and then lined with clay or huge sheets of plastic. When a landfill is full of trash, layers of soil and clay seal it inside.

The trash in a landfill lasts a long time. Landfill excavations have discovered 35-year-old newspapers you can still read. Even after twenty years, one-third to one-half of organic waste is still intact. (Organic waste is garbage like food waste and grass clippings.)

Although American landfill capacity is greater than it was a few years ago, it has become harder to find places to build new landfills. Nobody likes the idea of a landfill in their neighborhood. As a result, places where we can dispose of our trash are dwindling.

*15.5% of the country's solid waste is incinerated.*

Another way to dispose of trash is to burn it. This disposal method is called incineration or combustion. We can produce energy by burning waste. When we reclaim energy through the disposal process it's called resource recovery.

*21% of the country's solid waste is recycled.*

Much more of our household garbage could be recycled. Well-run city recycling programs can keep as much as 35% of residential waste away from disposal. However, recycling more than we do now depends on consumers being willing to participate in recycling programs.

### ***What can you recycle?***

Lots of things can be recycled.

*Paper, cans, plastics, and glass can all be recycled.*

These are just some of the things the City of Houston recycles:

Newspapers and magazines.

Aluminum and steel cans. A soda pop can is made of aluminum. A soup can is an example of a can made of steel. Empty aerosol cans are ok, too, because they are made of steel.

Plastic soft drink and detergent bottles labeled with a 1 or 2.

Glass jars and bottles.

It's especially important to recycle paper. Cans, plastics and glasses are each less than 10% of household waste. We throw away four times that much paper.

Remember to store your recyclables in the garage or in some other safe, dry area. Keep collecting them until it's recycling day at your house – when you set them out for curbside pickup or drop them off at a recycling center.

### ***How you prepare items for recycling?***

*Sort materials, rinse containers, and store in a safe, dry place.*

It's easy. With a little practice, it takes less than five minutes a day. Sort your materials and rinse any leftover contents from containers so your items won't begin to smell bad or attract ants and bees.

Here is how the City of Houston wants you to sort materials and get them ready to recycle.

Newspapers: place in paper bags, stack and store.

Cans: empty, rinse and store.

Plastic containers: empty, rinse, flatten and store.

Glass containers: empty and rinse. Separate by color – clear, brown, and green. Store unbroken.

Motor oil: drain and store in a sealed container.

### ***How does Houston recycle?***

The City collects all the recyclable materials we've talked about – and many more.

*The City of Houston offers several recycling opportunities which include:*

- *Curbside program*
- *Wood waste recycling*
- *Yard waste*
- *Neighborhood depositories*
- *Household hazardous waste*
- *Staffed recycling hotline*
- *Used oil*
- *Consumer drive-thru facility*
- *Christmas tree recycling*
- *Office paper recycling*

*Curbside program:*

Every other week the City of Houston provides curbside recyclables pickup to about 115,000 single-family homes. Families who participate in this recycling program can dispose of newspapers, magazines, glass bottles and jars, aluminum, tin, aerosol cans, plastic containers, telephone books, and used motor oil.

*Wood waste recycling:*

As part of its regular heavy trash pickup, wood waste is sorted from the heavy trash and converted into usable products such as compost, soil amendments, and boiler fuel.

*Yard waste:*

The City encourages citizens to reuse grass clippings as composting or mulching material. In addition, 92,000 families now participate in separate trimmings collection. This trimmings collection is for neighborhoods with automated garbage collection. Homes in this program are provided with collection of their grass clippings and small tree branches each week. The material is then used in consumer compost and mulch products.

*Neighborhood Depositories:*

The city operates four neighborhood depository sites to help you properly dispose of heavy trash. Scrap metal, wood waste, and other recyclables are recycled at these locations, too.

These neighborhood depositories have some restrictions on what they will take. They will not accept:

Bagged household garbage

More than four tires from an individual, or

Large quantities of building materials such as bricks and lumber

TIP – Distribute list with sites and addresses of neighborhood

depositories.

<http://www.ci.houston.tx.us/department/solid/basic.htm>

*Household Hazardous Waste:*

Every three months the City sponsors a household hazardous waste collection day. Antifreeze, batteries, fuel oil, paint, and paint thinner are collected for recycling at designated drive-thru dropoff sites.

*Staffed Recycling Hotline:*

The City staffs a recycling hotline, call to find out what is recyclable, the proper way to dispose of trash, and where to take recyclables. The number is 713-837-9130.

*Used Oil:*

City recycling trucks are equipped to collect used motor oil.

*Consumer drive-thru facility:*

The City has two consumer drive-thru facilities: Westpark Consumer Recycling Center and Kirkpatrick Recycling Center and Neighborhood Depository. You can drop off household recyclables at these sites.

*Christmas Tree Recycling:*

Each year the City offers a Christmas tree recycling service. The mulch from the chopped-up trees is used in City landscaping projects. Tree donors receive a free tree seedling.

*Office Paper Recycling:*

The City has an office paper recycling program for City employees. Types of paper collected include newspaper, computer paper and white ledger paper. TIP – Distribute list of services with addresses and times available.

***How Glass is Recycled.***

*Step One: Collected glass is sorted and taken to a processing center where it is crushed into very small pieces.*

*Step Two: The crushed glass is mixed with other things, heated and molded into new shapes.*

*Step Three: If bottles are being made, the finished bottles are then taken to factories where they will be filled again.*

Glass containers collected by the City are recovered, color-sorted, and made ready for recycling. Once the containers have been sorted into clear, green and brown glass, recycling centers crush the color-separated glass containers into cullet, or small pieces of recycled glass. The cullet is loaded onto trucks or railroad cars. Then its shipped to a processing company where its cleaned and made ready to be sold to a glass factory.

At the glass factory, the cullet is mixed with sand and other substances and heated. The molten recycled glass is then molded into the shapes of bottles and jars.

The new glass is just as strong as glass made without cullet. Glass never wears out, and glass containers can be recycled forever without loss of quality.

Glass recycling works so well that most bottles and jars contain at least 25% recycled glass. Recycling glass saves more than a quarter of the energy used to make glass from raw materials.

***How Paper is Recycled.***

*Step One: Collected paper is sorted and taken to a mill where it is shredded and mixed with water.*

*Step Two: The link is removed from the paper paste.*

*Step Three: The paper is then pressed and dried by giant metal rollers.*

The paper collected by the City of Houston is delivered to a processing center. At the processing center, the paper is carefully sorted into the different types used by paper mills.

Paper is shipped to a mill where it's brought to the pulper. Here warm water and chemicals break the paper into pulp. This pulp is called slurry. Since pulp starts out as 99% water and 1% fiber, slurry looks like a thick milkshake.

Next, ink is removed from the pulp. After all of the ink has been removed, the pulp is bleached and mixed with traditional pulp from trees. The pulp is now ready to be made into various types of paper.

The mixed pulp is pumped between two moving wire screens. The water is removed from the top and bottom, and the fibers form a mat. The mat is sent through pressing and drying rollers to remove more moisture. It's then ironed for smoothness, and the paper is packed in cartons or rolls.

45% of the paper Americans use is diverted from landfills and recycled by this process.

### ***How Plastic is Recycled.***

*Step One: Collected plastics are sorted into generic resin types.*

*Step Two: the plastics are baled for shipment to a processing plant.*

*Step Three: At the processing plant, the plastics are either shredded or made into pellets.*

*Step Four: The plastics are then ready to be made into a variety of new products.*

Plastics from the City collection program are sorted to increase their value and compacted to reduce shipping costs. Sorted plastics are chopped, washed, and converted into flakes or pellets that are then processed into new products.

In 1995, nearly 20% of all plastic bottles and rigid containers in America were recovered for recycling this way. The City requires the use of recycled plastic in automated garbage carts and curbside recycling bins.

### ***How Cans are Recycled.***

*Step One: Cans arrive for processing at a recycling plant.*

*Step Two: Shredded cans are melted in a special furnace.*

*Step Three: Each Ingot of recycled aluminum produces more than one million new cans.*

*Step Four: The can sheet made from recycled cans is used to make new cans.*

Steel cans are separated from aluminum ones by magnet. Then the cans go into a shredder. The cans are shredded so they take up less space when they go to the smelter to be melted and used again.

Aluminum is a good example of how recycling can reduce pollution. Making new cans from recycled aluminum cuts air pollution like sulfur dioxides by 95%.

In 1995, over 55% of steel cans and 2 out of every 3 aluminum cans were recycled.

### ***What Can You Do?***

Houston is cooperating with the state of Texas in its goal to cut in half the amount of waste landfilled by the year 2000. More materials than ever are being recycled by Houstonians. Since 1989, the City has collected over 205 million pounds of recyclables.

But we can do better. So now that we've described how the City and manufacturers are helping to recycle, let's talk about how you can help reduce trash.

A simple way to remember what you can do is to remember the **three R's**:

**REDUCE**

**REUSE**

**RECYCLE.**

Reduce the amount of waste you produce by purchasing products with less packaging and buying only those things you really need. Reuse products and their packaging. Fix or repair things instead of throwing them away. Buy used items instead of new ones. And of course, recycle!

### ***How you can help?***

*Use both sides of a sheet of paper*

*Uses paper goods with the label Made from Recycled Paper*

*Reuse plastic bags and packaging*

*Recycle everything you can*

Here are some helpful ways you, your family, and friends can practice the three R's:

- Buy products with less packaging and buy the largest volume of containers you can.
- Buy concentrates and refill packages.
- Buy reusable products.
- Bring your own canvas or reusable bags to the grocery store.
- Use fewer hazardous materials. (For example, plant marigolds to ward off certain pests instead of using pesticides.)
- Maintain and repair items like clothing and appliances.
- Reuse bags, containers, and twist ties.
- Sell or donate secondhand items at fairs and garage sales instead of throwing them out.
- Use energy-efficient light bulbs and rechargeable batteries.
- Shop for items made with recyclable materials.

### ***The Recycling Loop***

*Collecting items for recycling is only the first step*

*Manufacturers must make new products from the collected recyclables*

*You must buy recycled content materials*

Successful recycling is a loop.

The recycling loop begins with you, when you and others in the community put materials out for recycling or drop them off at a drive-thru facility.

The next step in the loop is when a manufacturer buys and uses the recyclables materials collected. The materials are made into new products and put back into the marketplace through retailers.

The last step in the process involves you again when you are asked to purchase the products made from recycled materials.

Then the cycle starts all over again. This can repeat forever.

Recycling isn't the total answer to the solid waste problem. You can't reuse everything. You'll always have something to throw away. You'll still have to bury some trash in a landfill or burn it in an incinerator.

But recycling can be cheaper than either burning trash or hauling it to landfills. The key is to remove as much as possible of the paper, glass, plastic, cans, and other reusable materials from our trash. If the amount of garbage can be reduced, it'll cost less to get rid of it.

The City of Houston has set up several programs to recycle many different types of materials. But it's people, not programs that make recycling work. We have to change the way we've been throwing things out for years. When we persuade everybody to recycle, and we all work together, recycling becomes more effective. It's up to each of us to make the effort.

So if you haven't been recycling, get started. And if you already recycle, keep saving things to reuse. Be for anything that helps the environment and cuts down waste. Here is a case where everyday actions can have a direct and immediate impact on the world around us.

The answer to our garbage problem begins in our homes and at our curbsides. Recycling starts with you. Remember the Houston Recycling Hotline number is 713-837-9130.