Do you think of your empty soda cans and food cans as a natural resource? They are. Americans currently discard about 2.7 million tons of aluminum each year. Of that, about 50 percent is recycled. Apart from the economic impact, the environmental savings of recycling metal are enormous. Recycling steel and tin cans, for example, saves $74 \%$ of the energy used to produce them

## Aluminum Cans

On average, Americans drink one beverage from an aluminum can every day. But we recycle just over $49 \%$ of the cans we use.

Since the cans are $100 \%$ recyclable, we could drastically reduce the energy needed to produce brand new cans simply by recycling our empties.

An aluminum can is able to be returned to the shelf, as a new can, as quickly as 60 days after it's put into your recycling container.

Coast-to-coast, there are about 10,000 locations that buy aluminum, making it easy for Americans to redeem their used beverage cans for cash. In fact, recycling aluminum cans is a $\$ 1$ billion/year industry in this country.

Recycling one aluminum can saves enough energy to run a television for three hours.

## A Day in the Life of a Recycled Can

1. Customer takes can to a recycling center or puts it into a recycling bin.
2. The can is transported to a processing facility.
3. A giant magnet lifts out cans that are made of metals such steel. Since aluminum cans aren't magnetic, they drop down to a conveyor belt and are gathered.
4. The aluminum is shredded, washed and turned into aluminum chips.
5. The chips are melted in a large furnace.
6. The melted aluminum is poured into molds called "ingots."
7. The ingots are taken to a factory where they're melted into rolls of thin, flat sheets.
8. From the sheets, manufacturers make new products, including new beverage cans, pie pans, license plate frames, and aluminum foil.
9. Beverage companies fill the cans and deliver them to grocery stores for customers to purchase.
10. Customers take used cans to a recycling center and the process starts all over again.

## Aluminum Foil and Bakeware

During World War II, Americans saved aluminum foil and even peeled off the silver wrapping from chewing gum wrappers to contribute to the war effort.

Today, we recycle the foil to conserve energy and protect the environment - two other patriotic causes.

There are thousands of products made from aluminum. From food wrap to disposable cookware, to the disposable burner bibs you use to keep your stovetop clean, the list goes on and on.

Aluminum can be recycled almost infinitely. The process involves simply re-melting the metal, a process far less costly and energy-intensive than mining the minerals necessary to create new aluminum.

For example, Americans discarded 460,000 tons of foil in 2010.

However, Americans are far more likely to recycle aluminum soda cans than aluminum foil.

## Household Hints

Unlike aluminum cans, foil may have food particles attached, making it harder for recycling facilities to accept. But foil is easy to wipe clean. So reuse it as much as you can, and clean it off before putting it in the recycling bin. Consider buying $100 \%$ recycled aluminum foil. You'll be supporting a process that uses five percent less energy than the traditional aluminum foil manufacturing process.

## Steel Cans and Tin Cans (soup cans, veggie cans, coffee cans, etc.)

Most people call them "tin cans," but the containers your green beans come in are mostly made of steel.

The term "tin" comes from the fact that these cans have a micro-thin coating of tin inside, to protect the flavor and prevent the can from corroding.

How can you tell a steel or tin can from an aluminum one? See if a magnet attaches to it. Steel is magnetic, and aluminum is not.

Steel cans make up about $90 \%$ of the U.S. food can market.

Americans use about 100 million steel cans every day. That's 36.5 billion cans a year.

About $71 \%$ of steel cans are recycled, making them one of the most recycled packaging products in America.

In addition, steel cans typically contain at least $25 \%$ recycled steel, but many are made almost entirely of recycled steel.

Where does this recycled steel come from? Mainly from scrap metal.

Recycling steel saves at least $75 \%$ of the energy it would take to create steel from raw materials. That's enough energy to power 18 million homes.

During the recycling process, steel cans (in bales or loose) are fed into the furnaces of a steel mill or foundry. They may be mixed with new steel.

Some of the new "mini" steel mills manufacture their products from $100 \%$ recycled steel.

## Steel, tin, and the California Gold Rush.

When you think of the California Gold Rush of the mid-1800s, your first thought may not be of canned goods. But it was the need to supply the gold miners with fruit, meat, and vegetables that gave rise to the demand for canned foods. By the start of the Civil War, around 30 million cans were being produced annually in the United States.

