

Aluminum



Aluminum is used to make things like beverage and food containers, foil, pie plates, frozen food trays, candy wrappers and even car bodies. All of these things can also be made from recycled aluminum.

Aluminum is good to use in these products because it doesn't rust, it's easily formed into many shapes and it's strong but lightweight.

How is aluminum made?

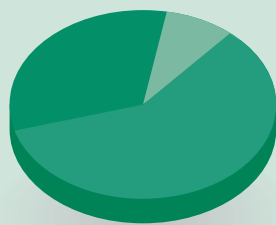
- Aluminum is made using a mineral called bauxite that is mined from the earth.
- The bauxite is mixed in a solution and heated to separate out the aluminum.
- The aluminum is then rolled out into sheets that can be molded into different products and packaging.

How is aluminum recycled?

- Crushed aluminum is shredded into small pieces.
- Magnets are used to remove steel, and any remaining paint and labels are removed with hot air.
- Shredded aluminum is melted in a hot furnace.
- The melted aluminum is poured into castings and cooled with water so that pieces of aluminum called ingots are formed.
- Aluminum ingots are then rolled into sheets at a manufacturing facility.

Fast Facts

- Recycled aluminum is as good as aluminum made from freshly mined bauxite.
- Between 75% to 85% of the soft drink cans in the home find their way into a blue box. (Source: CSR)
- Average recycled content of aluminum cans: 51.6% (in 1996). (Source: Waste Age Magazine, November '98, pg. 53)



In 1997, 90% of Ontario's population had access to aluminum can recycling and 59% to aluminum foil recycling. (Source: Ontario Materials Recovery System: Selected Programs, CSR, 1998)

How much aluminum do Ontario households recycle?

- Number of aluminum pop cans made per tonne of aluminum: Nearly 67,000
- Amount of aluminum sold for recycling by Ontario municipalities in 1998: 13,100 tonnes
(Source: Municipal 3Rs 1998 Database, 3Rs Information Partnership)
- Number of aluminum cans that could be made using Ontario's recyclable aluminum from 1998: More than 750 million



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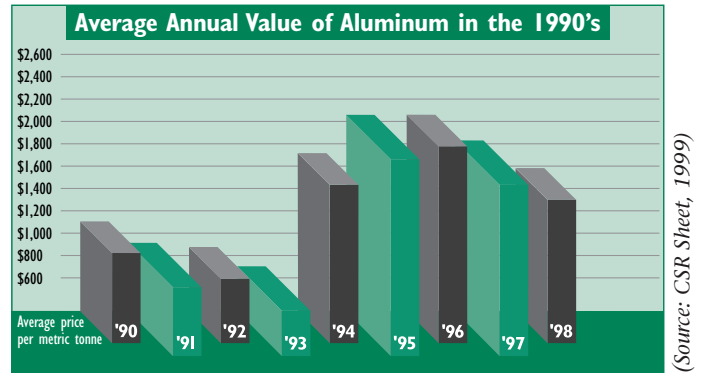


Why do we recycle aluminum?

- Percentage of energy saved by manufacturing aluminum cans with recycled materials: 95 (Source: CSR)
- Number of hours the average Canadian television can run on the electricity saved by recycling one aluminum can: 2 (Source: CSDA)

How much is aluminum worth?

- Aluminum is the most valuable material in the blue box. It is traded on the world commodities market, and so its price rises and falls with demand. Since 1990, aluminum has sold for as much as \$2,045 per metric tonne and for as little as \$758 per metric tonne on the spot market. (Source: CSR Sheet, 1999)



What about the first R?

- Number of times lighter the average aluminum pop can is today than when it was first introduced in 1935: 6 (Source: The Stewardship Circle, May 1999, Manitoba Product Stewardship Corporation)



For more information....

- Alcan Aluminum, www.alcan.com
- The Metal Institute, www.icme.com
- The Aluminum Association Inc. www.aluminum.org
- Aluminum Marketing Council www.aluminum-marketing.com
- Canadian Soft Drink Association (CSDA) www.softdrink.ca
- Can Manufacturers Institute www.cancentral.com
- Recycling Council of Ontario www.rco.on.ca