

## The Blue Box Series

Every wonder what happens to recyclables once you place them at curb or take them to your local recycling depot? In this series, RCBC will examine where and how newsprint, cardboard, metal cans, glass containers, rigid plastics and plastic bags are recycled. This month RCBC looks at metal cans.



## part 3: metal cans

Metal cans found on the shelves of your local grocer are commonly used to package perishable food items and are either made of bauxite, an aluminum ore, or tin. Tin cans are not 100% tin. They are actually steel cans that have been tin-plated. Metal cans are a valuable commodity and can be easily recycled. Even after the costs of collection and processing, recyclers can make a profit from recycling metal cans. For example aluminum is six to twenty times more valuable than any other packaging material.

## where can it be recycled?

Residents can easily recycle metal cans through their municipal curbside recycling program or at their local recycling depot. Large volumes of metal cans are accepted by many scrap metal recyclers across the province.

## where does it go?

Aluminum cans collected at the curb may be processed at the Novelis recycling facility, in Berea, Kentucky, or at the Rio Tinto Alcan smelter, in Kitimat, B.C. Novelis operates one of the largest aluminum can recycling facilities in the world. They process approximately four million used aluminum cans each year.

Municipalities and regional districts may send metal cans collected at the curb or at the recycling depots to scrap metal recyclers for processing. For example, the Columbia Shuswap Regional District sends their tin and aluminum cans to Richmond Steel Recycling, in Richmond, B.C.

## what is it recycled into?

Aluminum cans are recycled into new aluminum cans, foil, pie plates, window frames and automotive components. Tin cans are recycled into new tin cans, cutlery, appliances and razor blades.

## why recycle metal cans?

- It takes 100 years for a tin can and 500 years for an aluminum can to breakdown in a landfill.
- The energy saved from recycling an aluminum can, could run your television for 3 hours.
- It's easy! It only takes 60 days for an aluminum can to be recycled, refilled and back on the shelves.

## the recycling process

1. Metal cans are collected and sent to a sorting facility.
2. The tin-plated steel and aluminum cans are separated by large industrial magnets. Aluminum is a non-ferrous metal and is not magnetic.
3. The separated cans are then baled and sent to recycling facilities.
4. At the recycling facility, the cans are shredded and melted. The tin and steel are recycled together to produce an alloy. In some cases, the tin and steel are separated from one another by using a caustic solution to dissolve the tin off the can. The tin is then removed from the solution via electrolysis.
5. The metal is then poured into molds to form blocks which may be flattened to form sheets.
6. The blocks or sheets are sold to manufacturers to produce new metal products.

Metal cans can be recycled an unlimited number of times because they do not degrade through the recycling process.

For additional information, contact the **RCBC Recycling Hotline**  
604-732-9235 (Lower Mainland) | 1-800-667-4321 (province-wide)  
Monday through Friday, 9:00am-4:00pm | [www.rcbc.bc.ca](http://www.rcbc.bc.ca)

