



Glass Container Manufacturing Industry Overview

Glass container companies represent a \$5.5 billion dollar industry in the US, and employ about 18,000 skilled workers in 49 glass manufacturing plants located in 22 states. The vast majority of glass containers purchased in the US are produced domestically. Currently, there are 80 recycled glass plants in 35 states. On average, a typical glass recycling facility can handle 20 tons of glass per hour, with the majority of these plants supplying glass for reuse in the container plants. Importantly, glass container manufacturing companies continually invest in operations, technologies and available equipment to further reduce energy use.

Glass Container Recycling & Resulting Energy Reduction

In concert with the GPI Board of Trustees stated goal of utilizing 50% recycled content in their manufacturing process by 2013, glass container companies are working on the best ways to recover, sort, and process glass containers. Source separated collection programs have proven to be more effective at procuring quality recycled glass for bottle to bottle reuse than single source collection bins, where a number of material types need to be further sorted out for any beneficial reuse.

Saves energy

- Using recycled glass allows the industry to reduce energy input into its furnaces. Energy costs drop 2-3% for every 10% "cullet" (crushed glass containers) used in the manufacturing process. % This is due to the fact that recycled glass melts at much lower temperatures than raw materials, allowing glass companies to reduce furnace temperatures and use less energy.

Lessens greenhouse gas emissions

- For container glass, a relative 10% increase in cullet reduces airborne particulates by 8%, nitrogen oxide by 4% and sulfur oxides by 10%. For every six tons of recycled container glass used, one less ton of carbon dioxide is produced. (Source: Glass Recycling, "Kirk-Othmer Encyclopedia of Chemical Technology" 4th edition).

Lowers the bottom-line

- Using recycled glass can cut overall production costs by minimizing energy demands (since recycled glass melts at a lower temperature than raw materials), Reduced use of raw materials also extends the life of a furnace at a glass plant.

Reduces landfill dependence

- Recycling glass helps to preserve natural resources, while lessening the load on landfills—and helping communities avoid expensive disposal costs.