

FIBER GLASS INSULATION INDUSTRY

A LEADING USER OF RECYCLED GLASS



WHY WE CARE ABOUT RECYCLED GLASS

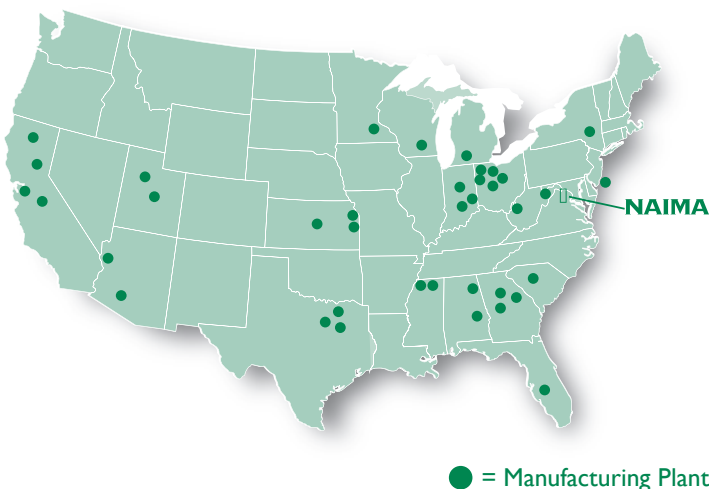
Fiber glass insulation manufacturers are the second highest users of mixed bottle cullet in the United States, next only to glass container manufacturers.¹ However, our members use fiberglass in a wide variety of applications:

- Building Insulation
- Pipe Insulation
- Air Handling Insulation
- Aerospace
- Appliances
- Automotive

The most recent survey showed that in 2014, facilities in the United States used more than 1.7 billion pounds of recycled glass. Since 1992, when NAIMA started collecting recycling data, 49.2 billion pounds of recycled material have been diverted from the waste stream.

OUR INDUSTRY'S U.S. FOOTPRINT

Glass cullet is used at a wide variety of locations as evidenced by a plant of map of fiber glass insulation manufacturers. NAIMA members operate 38 manufacturing facilities in 18 states, collectively employ 225,000 people² and contribute \$8 billion a year to the U.S. economy.



BENEFITS OF USING RECYCLED GLASS

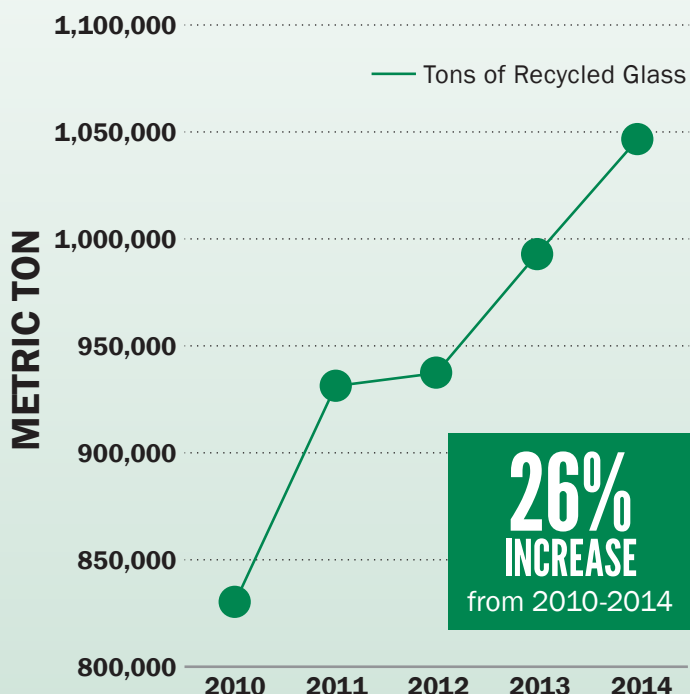
25%
LESS ENERGY

Glass cullet supply is important to fiber glass manufacturers, but a clean cullet supply is not always consistent. Fiber glass manufacturers could increase the amount of cullet they use if there were a steady and reliable supply. It isn't just that we could, we want to.

Besides the environmental benefit of diverting content from landfills, there is a direct economic benefit for our industry: using recycled glass cullet requires 25% less energy³ than using virgin materials for the manufacture of fiber glass insulation.

TONS OF RECYCLED GLASS

The main reason why more recycled glass is not used is simple: lack of availability. The demand is there, as evidenced by this chart showing the uptick in use of recycled content by our industry over the last 5 years:



WHAT MUNICIPAL GOVERNMENTS NEED TO KNOW

Municipalities evaluating their waste and recycling options need the facts on the market conditions for different waste types. When it comes to glass, there is a vibrant and growing market for recycled content with fiber glass manufacturers; the more we could get, the more we would use.

NAIMA MEMBER COMPANIES

Aislantes Minerales, S.A. de C.V. D.F.
México

Armstrong World Industries
Lancaster, PA

CertainTeed Corporation
Valley Forge, PA

Hollingsworth-Vose,
East Walpole, MA

Industrial Insulation Group, LLC
Brunswick, GA

Johns Manville
Denver, CO

Knauf Insulation
Shelbyville, IN

Owens Corning
Toledo, OH

Rock Wool Manufacturing Co.
Leeds, AL

ROXUL USA Inc.
Byhalia, MS

Thermafiber, Inc.
Wabash, IN

USG Interiors, LLC
Chicago, IL

NAIMA

NORTH AMERICAN INSULATION MANUFACTURERS ASSOCIATION

The North American Insulation Manufacturers Association ("NAIMA") is the trade association for North American manufacturers of fiber glass and rock and slag wool (mineral wool) insulation. NAIMA also tracks the industry use of recycled materials used in the production of insulation products.

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1. California Integrated Waste Management Board, Market Status Report, Container & Plate Glass (CIWMB.ca.gov/markets/StatusReport.Glass.html).
2. OSHA, "OSHA Priority Planning Process." Announcement of the Results of the OSHA Priority Planning Process, P. 58 (Dec. 13, 1995).
3. From SMI presentation.