



Product Description

Glass products are used for a variety of purposes and include consumer goods made of glass, such as tableware, cookware, and decorative items.

Mission

The mission of The Sustainability Consortium (TSC) is to improve the sustainability of products when they are made, purchased, and used, with a focus on manufacturers and the retail buyers who decide what products to carry in stores. The information in this document is drawn from our detailed research on known and potential social and environmental impacts across product life cycles. TSC acknowledges that other issues exist, but we have included here those that are most relevant to the decision making of retail buying teams and manufacturers. The topics are listed alphabetically for ease of reading; the order does not represent prioritization or other criteria.

Sustainability Insights



Consumers

Consumer Health and Safety

Broken glass, whether broken during use or after disposal, can cause injury. Manufacturers should educate consumers about proper disposal of glass and should treat and toughen glass to prevent it from breaking into dangerous shards.



Use of Resources

Climate and Energy

Glass processing and manufacturing consume significant amounts of electricity and energy, leading to greenhouse gas emissions. Manufacturers should procure from suppliers that help abate these impacts by measuring, tracking, and reporting energy use and greenhouse gas emissions, with a focus on reduction. They should also perform preventative maintenance on equipment, replace inefficient equipment, use renewable energy sources, and encourage efficient energy behaviors throughout their operations.

Material Efficiency

Production of glass depletes both energy and material resources, and improper disposal can represent a loss of otherwise reusable material and the potential release of pollutants. Manufacturers should minimize these impacts by designing products that optimize durability while using the least possible amount of material overall, as well as more material that is recyclable and comes from recycled sources.

Pollution

Some glass polishing operations can generate wastewater that is polluted with acids and lead. Manufacturers should implement best available practices and technology to treat this wastewater and guard against the release of under-treated wastewater into the environment.

Transportation and Logistics

Products are transported by land, sea, and air. Manufacturers should select carriers that use fuel-efficient vehicles to reduce emissions. Carriers can address fuel efficiency through preventative maintenance, the use of alternative fuels, and the selection of optimal vehicles, routes, and transport modes. Transportation efficiency can also be improved by maximizing load capacity in vehicles and optimizing the packing of transport vehicles.



Workers and Communities

Workers

Workers may be exposed to chemicals, dust, noise, or other industrial hazards. To help ensure worker health and safety, final product manufacturers should have a documented health and safety management plan, including a chemical management plan where needed, and provide safety training and personal protective equipment to workers. Manufacturers should procure materials from suppliers that address worker health and safety transparently and should perform audits when needed.