



### Product Description

Packaging is used to protect consumer products from damage and contamination, and to extend the life time of products during manufacturing, transportation, and consumption. Packaging includes primary, secondary, and tertiary packaging applications made of plastic, paper, metal, and glass.

### 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

Manufacturers should ensure consumer safety by selecting and sourcing materials and chemicals in accordance with applicable standards. They should also perform assessments to prevent any potentially harmful exposure to consumers.



#### Managing the Supply Chain

##### Supply Chain Transparency

Addressing many of the environmental and social challenges within a packaging product supply chain requires cooperation among companies at different stages of the supply chain. Chain-of-custody and other data-sharing systems and initiatives can help improve transparency about where materials are being sourced, and manufacturers and suppliers can work together to address common issues, such as energy, water, chemicals, worker health and safety, and labor rights.



#### Use of Resources

##### Climate and Energy

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

## **Material Efficiency**

Packaging design should be optimized to ensure that packaging performs its essential functions of containment and protection while minimizing use of materials, energy resources and environmental impacts across the life cycle of the packaged product. Under-packaging and over-packaging can both lead to increased impacts. These impacts may be mitigated by using more energy efficient manufacturing, selecting recyclable and sustainably managed renewable materials, and encouraging consumer recycling.

## **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 harmful chemicals or other industrial hazards. In some parts of the world, their rights to freedom of association, equal opportunity and treatment, and fair wages may not be protected. To help ensure worker health and safety and labor rights, 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 and labor rights transparently and should perform audits when needed.