



Product Description

Games and Puzzles include tabletop games containing playing boards, cards, playing pieces, and possibly batteries. Product types include recreational board games, card games, puzzles, and game accessories.

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

The materials used to create games and puzzles may contain heavy metals, such as lead or cadmium, or chemicals that may pose a risk to children who are exposed to them during play. Manufacturers should work with their supply chains to exclude these materials from their products, understand what risks may be present in their raw materials, assess alternatives, and routinely test incoming materials to ensure final products meet safety standards.



Managing the Supply Chain

Pollution

Processes required to make wood-based materials and plastic resins for games and puzzles can result in harmful wastewater and other types of pollution from manufacturing facilities. Manufacturers should engage with their supply chains to encourage best practices and technology adoption to properly treat wastewater and other potential pollutants from factories.

Supply Chain Transparency

Manufacturers should understand where the wood in their products comes from and engage with their upstream suppliers to ensure safe, healthy, and fair conditions for workers and communities. 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 sustainable forestry, energy, water, chemicals, worker health and safety, and labor rights.



Use of Resources

Climate and Energy

Materials processing and games and puzzles manufacturing consume significant amounts of 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.

Disposal and End-of-Life

Batteries disposed of in landfills can leach harmful chemicals into the soil and water. In addition, waste management and recycling workers may be exposed to harmful materials if batteries and other accessories are not removed from a toy before it is thrown away. Manufacturers should design toys so batteries are easy to identify and locate, and inform consumers of their options regarding battery recycling.

Material Efficiency

Manufacturing games and puzzles requires plastics made from crude oil, which can negatively impact both the environment and human health when sourced and used. Manufacturers should design toys so that they have a long life and can be reused or passed on to others. They can also optimize sustainable types and quantities of materials used.

Packaging

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, creating packaging materials from renewable resources, designing packaging to be recyclable, and encouraging consumer recycling.



Workers and Communities

Workers

Workers may be exposed to hazards in the workplace. 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, 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.