# Wooden Toys Sustainability Insights





## **Product Description**

Wooden Toys include products used for play and as collectibles, made primarily of wood which may be powered or unpowered. Product types include educational toys, figures, construction sets, musical instruments, puppets, and toy vehicles.

### 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 wooden toys 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 ensure safe materials and final products by excluding hazardous materials from their products, understanding their raw materials, assessing alternatives when needed, and routinely testing to ensure final products meet safety standards.

## Use of Resources

#### **Climate and Energy**

Wood processing and toy manufacturing, and the manufacturing of batteries used in powered toys, 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.

#### Deforestation

Unsustainable forest management for wood-based product production can result in biodiversity loss, reduced ecosystem quality, and increased greenhouse gas emissions. When sourcing wood and wood fiber, manufacturers should use sourcing policies that monitor progress on zero deforestation commitments. Sourcing policies should also promote protection of high conservation value forest habitats, which have unique plants and animals. Requiring third-party audits or certifications based on site-specific observations can also reduce risks of deforestation.

#### **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 wood toys requires wood and other materials that can impact both the environment and human health when grown, harvested and processed. 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

#### **Forced or Child Labor**

In some areas, there is a risk of forced or child labor, characterized by actions such as trafficking, withholding wages or documents, and restricting workers to the work site. Manufacturers should implement codes of conduct for their suppliers, audit facilities across their supply chains, and publicly report their performance, to help ensure that there is no use of forced or child labor.

#### 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.





TSC is jointly administered by Arizona State University and the University of Arkansas © 2017 Arizona State University and University of Arkansas For more information about our suite of products please visit: www.sustainabilityconsortium.org/what-we-offer