



### Product Description

Musical instruments that use power. Includes, but is not limited to, electric guitars, synthesizers, electric drums, and keyboards. Does not include acoustic guitars, flutes, or violins.

### 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.



### Use of Resources

#### Climate and energy

Processing and final product manufacturing of durable products 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.

#### Disposal and end-of-life

Manufacturers should participate in product stewardship programs, design products with reuse, refurbishment, and product end-of-life in mind, improve transparency concerning chemicals and materials used, and engage downstream partners to ensure that products are responsibly managed. Discarded durable goods need to be collected, treated, and disposed of responsibly to ensure that the product and valuable components and materials are available for further reuse or recycling, that workers are protected, and that pollution is minimized.

#### Material efficiency

Production of product and packaging components requires energy and depletes metal and other resources. Improper disposal can represent a loss of otherwise reusable material. 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.

#### 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, selecting recyclable and sustainably managed renewable materials, and encouraging consumer recycling.

### **Product efficiency**

Manufacturers should design products to be energy and water efficient in operation, engage consumers about efficient use behaviors, and have power management features available and enabled by default. This is important because there is a significant amount of electricity and water used for products requiring these resources for normal operation.

### **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**

### **Conflict Minerals**

Conflict minerals, including gold and ores that produce tantalum, tin, and tungsten, are those that are mined in areas where armed groups responsible for human rights abuses control mining operations and profit from mineral sales. Manufacturers should work to ensure that materials in their products are sourced responsibly to help improve stability and quality of life for miners and their communities.

### **Workers**

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

### **Sustainable Mining**

Mining operations can pollute the air and water, diminish natural resources, and jeopardize community and worker rights, health, and safety. Manufacturers should source their raw materials from suppliers that benchmark the environmental and social sustainability practices of their mining operations against recognized standards.

### **Consumer Health and Safety**

Products can contain chemicals that, depending on use and exposure, may be harmful to humans if consumed. Product manufacturers should determine whether such chemicals are in their products and strive to reduce, eliminate, or restrict their use. Manufacturers should work with their supply chains to exclude hazardous materials from their products, understand what risks may be present in their raw materials, and assess alternatives.