Product Description

Small Batteries include rechargeable and non-rechargeable batteries for toys, cameras, television remote, power tools, and other consumer applications. Product types include alkaline batteries, lithium-ion batteries, nickel metal hydride batteries, and nickel-cadmium batteries.

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

Use of Resources

Climate and Energy

Manufacturing of battery products consumes 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

Used batteries and battery chargers contain potentially dangerous materials, which should be collected and treated separately from other wastes, to avoid harm to individuals or the environment. Manufacturers should participate in product stewardship programs to ensure that batteries are responsibly managed and that materials are recycled whenever possible.

Material Efficiency

Manufacturing batteries and battery chargers requires the consumption of energy and raw materials. To maximize material efficiency and battery longevity, manufacturers should design their batteries to last longer under expected use conditions, optimize the types and quantities of materials used, and consider the end-of-life and recycling of their products.

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.

Pollution

Some battery manufacturing processes can release compounds into the environment that can pollute the water and air. Manufacturers should implement best available practices and technologies to abate these emissions and consider substitute materials when appropriate.

Product Efficiency

Manufacturers should design energy-efficient battery chargers, to help abate the negative impacts of energy generation during usage.

Workers and Communities

Workers

Workers may be exposed to chemicals or other industrial 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 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.