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**

#### **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 determine if and where forced or child labor occurs, and work with supply chain partners and experts to address these issues and ensure all workers have fair working conditions.

## **Workers**

Workers may be exposed to chemicals, dust, noise, or other industrial hazards. To help ensure worker health and safety, 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 transparently and should perform audits when needed.







# CDs and DVDs

Sustainability Snapshot







# **Product Description**

CDs and DVDs include optical data storage media used for music, video, games, or software. Product types include CD-ROMs, DVDs, Blu-ray discs, recordable CDs, and rewritable CDs.

# **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**

Manufacturing CDs and DVDs 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**

Improper disposal of CDs and DVDs can lead to impacts from landfilling and litter. CDs no longer useful to their owners need to be collected and disposed of responsibly, to ensure that the product and materials are available for further reuse or recycling. Manufacturers should participate in product stewardship programs and engage downstream partners to ensure that products are responsibly managed at the end of their useful life.

## **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.

## **Transportation and Logistics**

Products are transported by land, sea, and air. Manufacturers should select carriers that use fuel-efficient vehicles to reduce emissions. Carriers