



### Product Description

Bicycles are used for recreation and transportation, and include products such as children's, mountain, and road bicycles.

### 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



#### Managing the Supply Chain

##### 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.



#### Use of Resources

##### Climate and Energy

Component processing and bicycle manufacturing 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.

##### Material Efficiency

Bicycle frames require significant amounts of energy to produce, and the impacts of mineral extraction, metal processing, and final assembly can be reduced through product longevity. Bicycle designers should choose materials that enhance durability, and use modular design to promote reuse and upgrading of the product.



## Workers and Communities

### **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.