



### Product Description

Automotive Tires include devices that are used to provide traction to automotive wheels and cushioning to vehicles and that are made of materials that include natural and synthetic rubbers, fabric, carbon black, and steel cords. Product types include car tires, truck tires, and motorcycle tires.

### 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

##### Product Efficiency

Tires that are underinflated or have high rolling resistance can lower automotive fuel efficiency. Manufacturers can help increase fuel efficiency and thereby reduce automobile emissions by designing tires to minimize rolling resistance and educating consumers about how to select and maintain tires.



#### Managing the Supply Chain

##### Sustainable Forestry

Unsustainable rubber plantations can destroy natural habitats, decrease biodiversity, degrade land and water, and contribute to climate change. Manufacturers should source rubber from suppliers that are implementing sustainable forestry practices to minimize impacts and improve yields to reduce needed acreage.

##### Workers

Workers in synthetic rubber production may be exposed to harmful chemicals. To help ensure worker health and safety, manufacturers should implement codes of conduct for their suppliers and audit their supply chains for safe working conditions.



#### Use of Resources

##### Climate and Energy

Burning fuel to produce carbon black leads to emissions of pollutants that can contribute to climate change, smog, acid rain, and other impacts. Improving the energy efficiency of carbon black production through best practices and reusing tires can help abate the negative impacts of energy generation.

### **Disposal and End-of-Life**

Tires that are improperly disposed of at end-of-life can release harmful chemicals into the environment, cause problems with uncontrolled burning, and harbor disease-causing mosquitos. Manufacturers should participate in retreading and stewardship programs that collect used tires for reuse, recycling, waste-to-energy, and proper disposal.

### **Material Efficiency**

Tires are made from substances (e.g., rubber, carbon black, various metals) whose production, use, and ultimate release into the environment can create pollution and cause other adverse environmental impacts. Manufacturers should mitigate these impacts by designing tires that use less of these materials and more benign substitutes, where appropriate.

### **Pollution**

Proper end-of-life disposal is very important, because burning tires releases harmful compounds to the air that pose a significant threat to local communities. Solvents used in the tire manufacturing process can evaporate and threaten worker health. Manufacturers should use best available practices and technology to reduce factory emissions, design tires that minimize potentially risky materials while maximizing the useful life, and help manage tires responsibly after use. Care should be taken to minimize the risk to workers, and better alternatives should be identified and used where possible.