Transportation
Sustainability Snapshot

Product Description

The transport of materials, intermediate goods, and final products in consumer product supply chains, by road, rail, sea, or air.

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.

Managing the Supply Chain

Biodiversity

During the transport of goods across international borders, non-native species of plants, insects, and animals can be accidentally introduced into new regions and become invasive, disrupting the ecological balance of the local region and threatening biodiversity. Carriers should perform risk assessments to identify potential problems and take appropriate steps to mitigate these risks, including vehicle and container inspection, and changes to vehicle design.

Use of Resources

Climate and Energy

Vehicles that transport goods and materials via air, rail, road, or sea in a consumer product supply chain use significant amounts of fuel, resulting in greenhouse gas emissions and other air pollutants. Transport carriers can reduce fuel consumption by making engines more efficient through design and preventative maintenance, improving aerodynamic performance, using lower-carbon fuels, and operating vehicles more efficiently, with lower speeds and driver advice systems. Within the supply chain, carriers and shippers can shift from more carbon-intensive (air and road) to less carbon-intensive (rail and sea) modes where feasible, optimize routes and the location of distribution points, and collaborate to improve the number of vehicles that are fully loaded.

Workers and Communities

Community Rights

Transportation of goods within a supply chain can have negative impacts on communities, including vehicle accidents and health risks in areas of heavy traffic, noise from distribution centers and hubs, and air and water pollution. Transport carriers should engage with local communities in planning and risk management, and work with vehicle manufacturers to improve vehicle design to reduce noise and emissions.

Workers

Transportation workers may be subject to health risks due to material handling, excessive working hours, poor vehicle ergonomic design, and exposure to air pollution from vehicle operation and fugitive gases in containers. In some areas, they may also be denied basic labor rights, such as fair wages or the right to collective bargaining. Transport carriers should implement worker health and safety programs, including training, use of personal protective equipment, control of worker hours, and tracking and reporting of injury and illness data. Carriers should follow a standard based on internationally recognized labor principles.