



Product Description

Juice includes fruit and vegetable-based carbonated and non-carbonated beverages containing up to 50% other ingredients by volume, such as water, vegetable juice, sugar, colorings, and flavorings. Product types include orange juice, apple juice, juice cocktail, juice drink, fruited nectar, and frozen juice concentrate.

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

Land and Soil

Improper soil management can remove nutrients, release greenhouse gases, and cause soil loss, while clearing land for agriculture can lead to deforestation. Growers should use efficient soil management practices, including reduced soil tilling when applicable and prevention of soil erosion. Manufacturers should use sourcing policies that monitor progress on zero deforestation commitments. Sourcing policies should also promote protection of high conservation value forest habitats, which have unique plants and animals. This reduces the risk of biodiversity loss, diminished ecosystem quality, and increased greenhouse gas emissions that can occur when forests are cleared for agriculture.

Supply Chain Transparency

Addressing many of the environmental and social challenges within an agriculture supply chain requires cooperation among companies at different stages of the supply chain. Manufacturers should determine the locations of farms that produce their ingredient supply and engage in initiatives that improve transparency, communication, and data sharing. Suppliers can work together to address common issues, such as energy use, water availability and quality, chemical use, worker health and safety, and labor rights.



Use of Resources

Climate and Energy

Ingredient processing and final product manufacturing can consume significant amounts of electricity and energy, leading to greenhouse gas emissions. Manufacturers and growers can reduce these impacts by measuring and tracking energy use, performing preventative maintenance on equipment, and replacing inefficient equipment.

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.

Water

Ingredient production can use a significant amount of water and contribute to freshwater depletion, which is problematic in water-stressed regions. Growers can measure and track water use, and use methods such as precision agriculture, which applies only the amount of water needed, or irrigation water management to improve water efficiency.



Workers and Communities

Workers

Workers may be exposed to dust, chemicals, or other industrial hazards. To help ensure worker health and safety and labor rights, 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 in their facilities. Manufacturers should procure materials from suppliers that transparently address worker health and safety and labor rights during farming and perform audits when needed.