# Coffee

# Sustainability Snapshot







#### **Product Description**

Roasted and unroasted coffee beans from plants of the genus Coffea. Includes, but is not limited to, ground coffee, whole bean coffee, instant coffee, and coffee pods. Does not include ready-to-drink coffee beverages.

## 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**

Certain global pollinator populations, including honey bees, other managed bees, and wild bees, are experiencing increased health and population challenges due to a diverse mix of factors including parasites, pathogens, predators, exposure to crop and bee protection products, habitat loss, lack of nesting sites, poorquality forage, and queen issues. Growers can help to reduce these impacts by using integrated pest management, planting pollinator habitat on marginal land, and maintaining natural habitat around the farm. Supply chain partners can conduct research on the causes of pollinator decline and invest in prevention and mitigation practices.

#### Climate and Energy

The production of crops requires signicant amounts of energy. The burning of fossil fuels to produce this energy, as well as the production and use of fertilizers, result in greenhouse gas emissions. Growers can reduce these impacts by measuring and tracking energy use, performing preventative maintenance on equipment, and replacing ineficient equipment. Additionally, growers can minimize impacts by implementing a nutrient management plan, using precision agriculture, which applies only the amount of fertilizer needed, or low-energy irrigation, and optimizing the size and eficiency of farm vehicles.

### **Fertilizer and Nutrients**

Improper management and use of fertilizers can lead to local water pollution and release greenhouse gases during production. Growers should use a nutrient management plan to improve the ef ciency of fertilizer and manure use for production. Growers can use precision agriculture, which applies only the amount of fertilizer needed. Where appropriate, growers could plant vegetative buffer zones around streams to help prevent water pollution via nutrient runoff.

### **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 ef cient 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 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.

#### Water

Farming can use a signi cant 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, low-water or dry-processing methods, or irrigation water management to improve water ef ciency.



### **Use of Resources**

## **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-ef cient manufacturing, creating packaging materials from renewable resources, designing packaging to be recyclable, and encouraging consumer recycling.



## **Workers and Communities**

#### Forced or Child Labor

In some areas, there is a risk of forced or child labor, characterized by actions such as traf cking, 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 to ensure all workers have fair working conditions.

#### **Smallholder Farmers**

Growers on small farms, called smallholder farmers, may have limited access to information, technology, and resources. Manufacturers should determine where their crops are grown, understand if they source from small farms, and work with organizations that help smallholder farmers overcome challenges and achieve greater and more sustainable results.

## Workers

Farm workers, especially women and migrants, may face unfair pay, discrimination, and limited freedoms. They may also be exposed to chemicals, dust, or other hazards. Manufacturers can implement programs to ensure they are sourcing from growers who protect labor rights and ensure the health and safety of their workers.





