Consumers

Community Rights
Ease of access, improper control, and a lack of consumer education about pharmaceutical products can lead to prescription and over-the-counter drug misuse and abuse. Manufacturers should support properly integrated drug monitoring programs and implement consumer and healthcare education to help mitigate these potential social impacts.

Consumer Health and Safety
Manufacturers should formulate products to contain ingredients in accordance with applicable safety standards and should perform any necessary assessments on ingredients and formulations. Manufacturers should list ingredients in accordance with regulatory requirements and communicate proper usage and disposal instructions to consumers in a clear and accessible fashion.

Use of Resources
Climate and Energy
Ingredient processing consumes 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, and encourage efficient energy behaviors throughout their operations.

Disposal and End-of-Life
Pharmaceutical products should be formulated with end-use in mind, because these products may go down the drain and pass through wastewater treatment plants where biodegradation occurs.
Manufacturers should obtain full chemical disclosure of raw materials from suppliers, perform assessments of ingredients, and replace non-biodegradable chemicals or biodegradable chemicals that break down into unacceptable compounds with better alternatives.

**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, selecting recyclable and sustainably managed renewable materials, and encouraging consumer recycling.

**Water**
Ingredient manufacturing for pharmaceutical products can use a significant amount of water, which can contribute to freshwater depletion and may be problematic in water-stressed regions. Manufacturers should procure ingredients from suppliers who measure water use, and perform water use assessments throughout their supply chains, in order to map water risk in different geographical regions and mitigate impacts associated with freshwater depletion. Manufacturers should assure that water pollution is avoided throughout their supply chains, including where local government monitoring is lax.

**Workers and Communities**

**Workers**
Workers may be exposed to chemicals or other industrial hazards during production. To help ensure worker health and safety, manufacturers should procure ingredients from suppliers that transparently address worker health and safety and perform audits when needed.