Managing the Supply Chain

Mineral Resources
Mining processes used to extract ores and process raw metals create acidic by-products that, when not handled properly, can contaminate land and water around the mine and processing facilities. Manufacturers should optimize use of metals in their products, design products so that metals can be recovered at product end-of-life, and look for opportunities to engage with upstream suppliers of minerals to produce less waste at mines.

Supply Chain Transparency
Chain-of-custody and other data-sharing systems and initiatives can help improve transparency about the materials used in small appliances and the chemicals and processes used to manufacture those materials. Manufacturers and suppliers can work together to create and implement solutions to common challenges related to materials in small appliances such as energy requirements to produce them, potentially hazardous chemicals used in manufacturing, and efficient exchange of information across the supply chain.

Use of Resources
Climate and Energy
Component manufacturing and final product assembly can consume significant amounts of electricity and energy, leading to greenhouse gas emissions. Manufacturers can help abate these impacts by measuring, tracking, and reporting energy use and greenhouse gas emissions, with a focus on reduction. They can also perform preventative maintenance on equipment, replace inefficient equipment, and encourage efficient energy behaviors throughout their operations.
Disposal and End-of-Life
When a small appliance is no longer useful to its owner, the product, including its components and materials, needs to be collected, treated, and disposed of responsibly to ensure the proper management of any hazardous materials and the availability of valuable components and materials for further reuse or recycling. Manufacturers should participate in product stewardship programs and engage with downstream partners to ensure that products are responsibly managed during disposal.

Pollution
When small appliances or their components are burned or disposed of improperly, heavy metals and other hazardous materials may be released, posing a threat to humans and the environment. Manufacturers should participate in product stewardship programs and engage with downstream partners to ensure that their products are captured and handled appropriately at the end of their useful life to avoid these impacts.

Product Efficiency
Operating a small appliance requires a significant amount of electricity. Manufacturers should design small appliances to be energy-efficient in operation and have power management features where appropriate.

Workers and Communities

Conflict Minerals
Electronic devices contain minerals, including gold and ores of tantalum, tin, and tungsten, that may be mined in areas where groups responsible for human rights abuses control and profit from mining operations. Manufacturers should ensure that materials in their products are sourced responsibly and are not from these areas, and should try to help improve stability and quality of life for miners and their communities.

Workers
Workers may be exposed to hazards in the workplace. In some parts of the world, their rights to freedom of association, equal opportunity and treatment, and fair wages may not be protected. To help ensure worker health, safety, and labor rights, final product 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. Manufacturers should procure materials from suppliers that address worker health and safety and labor rights transparently and should perform audits when needed.