



Infographic illustrating key steps in the lifecycle of consumed materials and pointing out where greenhouse gas emissions are produced. The steps are as follows:

First, greenhouse gases are produced during extraction and processing, when raw materials are removed from the earth and processed into production-grade resources. Next, greenhouse gases are produced when those resources are processed during manufacturing of items that we buy. Those items reach consumers through distribution and retail. All of this happens during the upstream phase before we hold a product in our hands. Once we have control of an item, we make decisions around use, reuse, and repair, which affects the “lifecycle value” of a product. When we are ready to discard an item, we sort separately to ensure that recyclables are recycled, food and yard waste are composted, and waste that poses a hazard is disposed safely. From here the downstream phase starts. Items are collected and transported by materials management companies and delivered to one of three destinations. Landfill signifies the “end of life” of a product, and some materials continue to create greenhouse gases for centuries. Compost facilities turn food and yard waste into compost, which can be used to help grow future resources that are used to make products later on, closing the loop. Similarly, material recovery facilities process recyclable materials into post-consumer resources that can be used instead of raw natural resources during production and manufacturing, which helps to prevent emissions from extraction and processing.