

Zero Waste has been defined by the Zero Waste International Alliance as a philosophy and visionary goal in which manufacturing and supply chains emulate natural cycles, where all outputs are usable inputs for other value-added processes. It means designing products and managing materials and systems for maximum resource conservation, highest, most efficient use, and minimum negative environmental impact. It means eliminating harmful discharges to land, water and air, by preventing rather than managing waste and pollution.

*Highest/Best Use*



Redesign Manufacturing & Supply Chain

- Mandate Extended Producer Responsibility (EPR)
- Produce durable, reusable, recyclable, and recycled-content products
- Use environmentally sustainable feedstocks & materials
- Design for repair, reconditioning, disassembly, deconstruction and recycling
- Make brand owners/first importers responsible to take back products & packaging

Reduce/Refuse/Return

Reduce Toxicity

- Reduce toxic materials in products
- Replace toxic materials in products with less toxic or non-toxic alternatives

Reduce Consumption

- Purchase and use less
- Apply Environmentally Preferable Purchasing (EPP) standards to purchasing

Reduce Packaging

- Purchase products with less packaging
- Incentive durable, reusable packaging

Reuse/Preserve Form & Function

- Repair and recondition products
- Deconstruct and salvage buildings and building products
- Support thrift stores and charity collection

Recycle/Compost/Digestion

- Recover & return materials to economic mainstream for remanufacture to like-value products
- Recover & return materials to economic mainstream for composting to value-added soil amendment products
- Ambient temperature (<200 degrees) processing of organic materials for recovery of fuels and energy, with composting of residue

Down Cycle

- Recover & return materials to economic mainstream for remanufacture to non- or marginally-recyclable products, such as office paper to tissue paper, or soda bottles to toys or clothing

Bury/Incinerate/Waste-Based Energy

- Bioreactor landfilling, when design incorporates sufficient safety & environmental protections
- Beneficial landfill use, such as alternative daily cover (ADC) or landfill construction
- Traditional landfilling
- High-temperature, energy-intensive processing to recover fraction of embodied energy, from non-source-separated, mixed resources, including but not limited to: mass burn, co-firing, fluidized bed, gasification, plasma arc, pyrolysis

*Lowest/Worst Use*