Loss of Resource Value
- Interment in landfill
- Incineration that reduces waste volume (then landfill)
- Extraction and combustion of fossil fuels

Recovery of Only Energy or Material Bioresources
- Use in transportation or to make electricity, steam, and/or heat
- Pipeline injection of bio-CH4 to offset fossil-CH4
- Compost or digestate usage that increases soil nutrients or carbon (but not both)

Recovery of Energy and Material Bioresources
- Recovery of edible foods for human or other animal uses
- Compost or digestate usage that sustains soil structure and nutrients and that sequesters carbon to net-zero.

Upcycling
- Source reduction of organic waste
- Restoration of degraded or depleted soils
- Long-term carbon sequestration (e.g., ground injection of bio-CH4)

Recycling

Downcycling

Discard (Wastage)