

DESIGN PRINCIPLES FOR WASTE PREVENTION

- Design to source rapidly renewable, re-used, reclaimed, or recycled materials using low-waste extraction
- Choose materials wisely, considering post-use pathways
- Dematerialize; use less to make as much
- Add value to byproducts for use in other industries
- Use energy efficient and low waste manufacturing and transport
- Lightweight the products and packaging while preserving recyclability
- Minimize packaging relative to product size

What waste is created at each stage upstream?

What can we redesign?

PRE-USE



DURING USE

- Design for what the user needs, without excess
- Optimize performance for the application
- Design for durability and repair
- Provide clear instructions for proper use
- Ensure accurate 'green' marketing claims
- Use requires low or no energy
- Plan a repair program

Will using this create solid waste?

How can we prevent or reduce the amount of waste created?

Can we enhance performance during use?

POST-USE

- Design for modularity; ease of repair, parts replacement or disassembly for recycling
- Reuse by user or by another industry
- Recyclable or Compostable
- Include instructions for disposal

How will the user know what to do once they're done using the item?

Communicate with waste handlers to understand and design for the post use reality of your products and packaging.

Waste prevention starts where design begins

The National Zero Waste Council offers these Design Principles for Waste Prevention and Systems-Thinking. Use these to put your company's design thinking to work designing away waste throughout the product or package life cycle.

To read the full list of Design Principles, visit: nzw.ca/focus/design/principles-and-reviewers