



What is Zero Waste?

Zero Waste means

- The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, materials, packaging, and food
- That no materials go to landfill or incinerator
- That no materials are discharged to land, water, or air, threatening environmental or human health

(Definition from Zero Waste International Alliance)



How to Achieve Zero Waste

To achieve zero waste (or get darn close) there must be

- An Integrated sustainable **System** of programs, legislation, plans, innovation, and incentives
- An absence of contractual obligations to landfill and/or incinerate
- **Technology** to efficiently collect, sort, process and market all discarded material
- **Create** and support **markets** for recycled materials and repaired products
- **Political will** to stop long term disposal contracts and commit to waste prevention & diversion
- Zero Waste **Planning** including immediate and long term mandates to achieve zero waste
- Each year should have **Commitments** to programs and a budget to implement them
- As close to 100% **Public Participation** in the programs as possible

A Zero Waste System requires

Waste Prevention

- **Reduction of consumer demand.** Want less, use less
- **Product and packaging design** for reduction, reuse, repairability, recyclability, durability, reduced toxicity
- **Extended producer responsibility.** Incorporates the environmental impact costs of a product's entire life cycle into the market price
- **Circular economy business model** is an economic system that fully utilizes discards by circulating them in a sustainable manner.
- **Pay as You Throw** charges users for waste disposal while **recycling is free or low-cost**

Reuse

- **Right to repair.** Accessibility of reasonably priced spare parts, and repair education
- **Secondhand economy.** Widespread opportunities for swap, borrow, rent, donate, thrift shops, repair
- **Reuse characterization studies** to show the economic potential for reuse (condition, fair market value of reusables, repairability)
- **Infrastructural Inventory.** Characterization of existing / expansion of new municipal reuse infrastructure
- **Upcycling.** Transforming unwanted products into new materials / products of better quality

Recycling and Organics

- **Targeting 100%** of recyclables and organics
- **Mandatory, curbside** pickup of recyclables and organics (food and yard)
- **Efficient routing** for collection and export
- **Effective Diversion.** Discards must be reused, recycled, composted and/or anaerobically digested and delivered to processing facilities
- **Waste characterization studies** should include information about recycling and organics collection. Studies should analyze the **distribution, market value, recyclability, compostability and/or anaerobic digestibility** of every part of the discard stream

Technology

Material Recovery Facilities (Sorting of Recyclables)
Composting (Utilizes oxygen to decompose organic material)
Anaerobic Digestion (Does not utilize oxygen to decompose organic material)

Product Repair Facilities
Dual Bin, Fuel Efficient Trucks
Product Evaluations & Certification

Participation

Waste is not waste but a valuable resource. This mindset change requires **100% consumer participation.** The City must commit to sufficiently **fund education** and **enforcement** programs that utilize a multitude of consistently applied approaches. Increasing participation means making **permanent behavior changes.**

To reduce consumption and achieve 100% participation in sorting, reuse & recycling everyone must

- Be **aware** of program features and incentives
- Be **understanding** of how to participate and benefits of the program
- Be **positive and open** to participating
- Intend to and be **motivated** to participate consistently

All barriers to participating should be removed and participation should be convenient.

Budget and Legislation

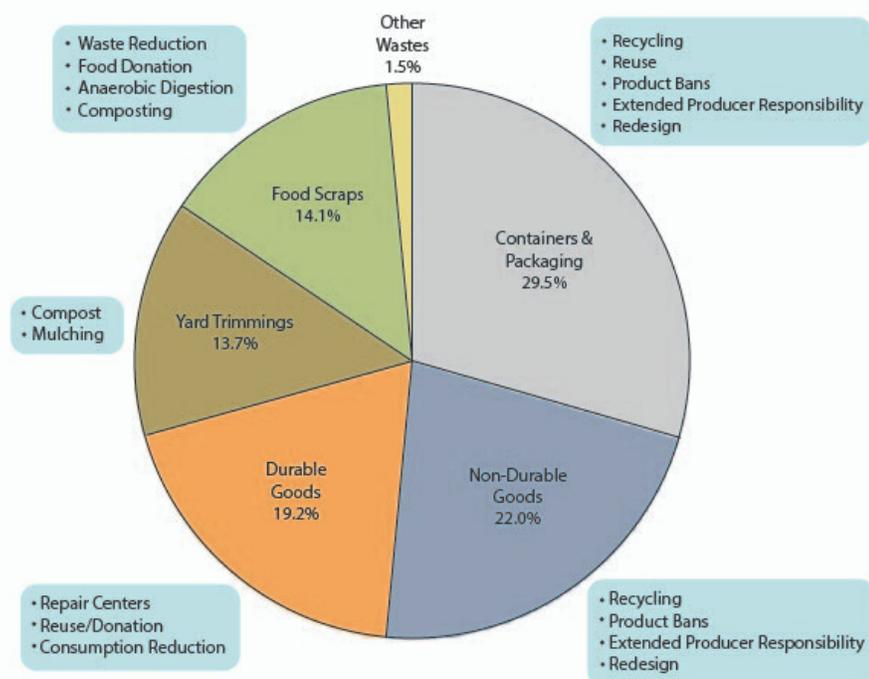
- Mandatory, curbside, universally available collection programs that transition us away from landfill and incineration
- Pilots and Research to develop, test and tweak new initiatives, adapt best practices and efficacious budgets
- Robust, continuing, multi-approach education, motivational outreach
- Sufficient capacity for product reuse infrastructure and programs (e.g. swap, rent, borrow, barter, repair, thrift) and secondary and surplus food use (e.g. food pantry donations and DonateNYC)
- Sufficient processing capacity for sorting, recycling and food scraps, and marketing
- Planning requirements, enforcement requirements, mandates for participation, PAYT, EPR

Education

Motivation

Enforcement

"Pay As You Throw"



Zero Waste Systems can **efficiently and safely manage** each material in the waste stream.

Zero Waste Systems can create more **diverse local economies** and **improve public and environmental health** by reducing air and water pollution.

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