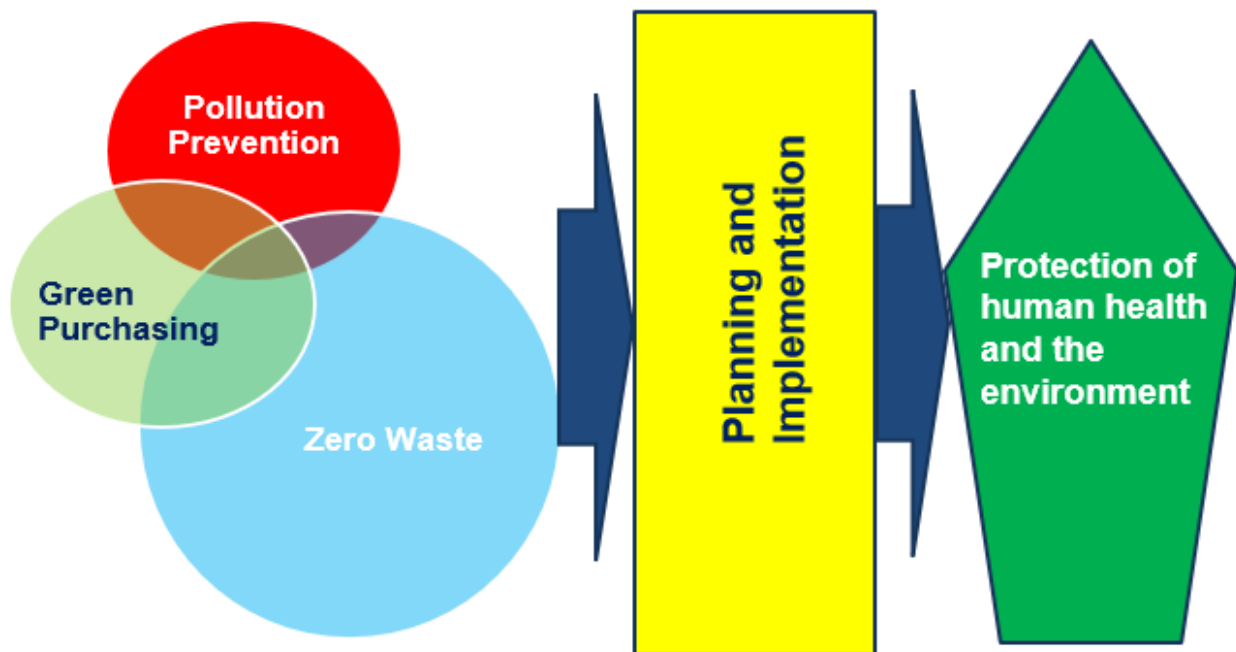


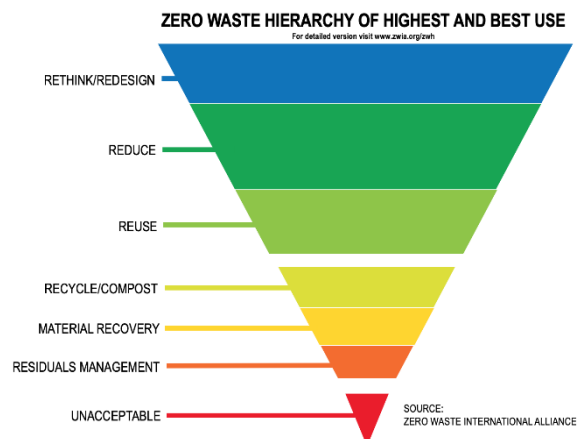
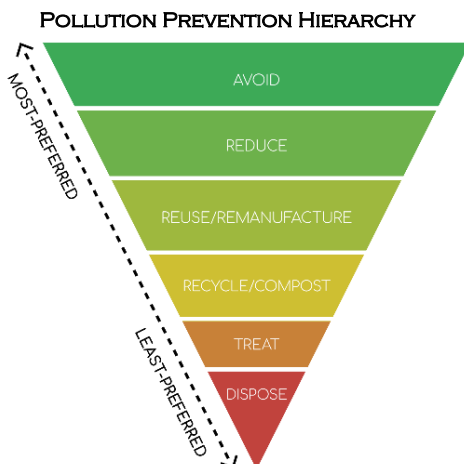
Pollution Prevention and Zero Waste (P2ZW) Combined Approach to Waste Management

Pollution Prevention (P2) and Zero Waste (ZW) are methodologies to prevent and manage waste. Each discipline includes similar waste management hierarchies. In practice, P2 deals with preventing or reducing waste at the source and focuses on removing or reducing toxics. ZW also promotes prevention but is more focused on non-hazardous solid wastes. Green Purchasing is a specific approach for both P2 and ZW to buy products that are more environmentally friendly, safer to use, and contain fewer toxic ingredients or no toxics at all.

When Pollution Prevention, Green Purchasing, and Zero Waste are combined, a holistic approach to waste prevention and management, resulting in protection of human health and the environment is achieved.

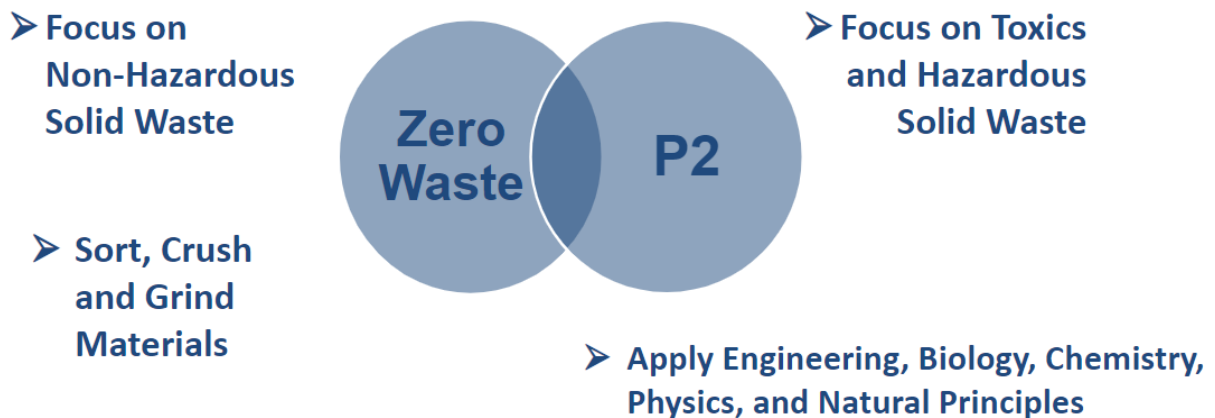


Comparing the Pollution Prevention hierarchy and the Zero Waste hierarchy, there is agreement: the first thing to do is to prevent waste at the source by rethinking or redesigning the process, product, or packaging. Both management hierarchies challenge people to think “upstream” and make changes so that the pollutant or the waste is not created in the first place. Reducing material use and practicing reuse are effective upstream strategies.



The Zero Waste hierarchy goes on to specify that material recovery is the next thing preferable after recycling or composting, then residuals management. Zero Waste specifies that it is unacceptable to use “waste to energy” methods to dispose of waste (any technology that operates over 212°F). The goal for Zero Waste is for no or practically no materials to go to a landfill, incinerator, or the environment. In the pollution prevention hierarchy, there is recognition that wastes containing toxics may still be created and if so, they should be treated to lessen their toxicity prior to disposal.

The historical focus of Zero Waste has been on non-hazardous solid waste, such as municipal solid waste from residents and businesses. P2 traditionally focuses on preventing toxics and hazardous solid wastes from industry.



One of the critical strategies for combining both hierarchies, P2ZW, is for people to “think outside the box” and brainstorm about possible ways to reduce or prevent generation of waste. A useful activity is to think about “moving up the ladder” of the hierarchy. The first step is to determine exactly the process, material, or product that you want to change. Then, decide where it is generated, using the nine points of generation, as defined by the TRUE Zero Waste rating system (the U.S. Green Building Council Zero Waste Certification program), Warehousing & Distribution, Offices, Food Services, Grounds, Construction, Manufacturing, Vehicular Maintenance, Retail, Housing & Hospitality.

Next, determine the current practice. Then, who would need to be engaged if changes were to be made? Finally, brainstorm as many options as possible for each step up the ladder from the current practice.

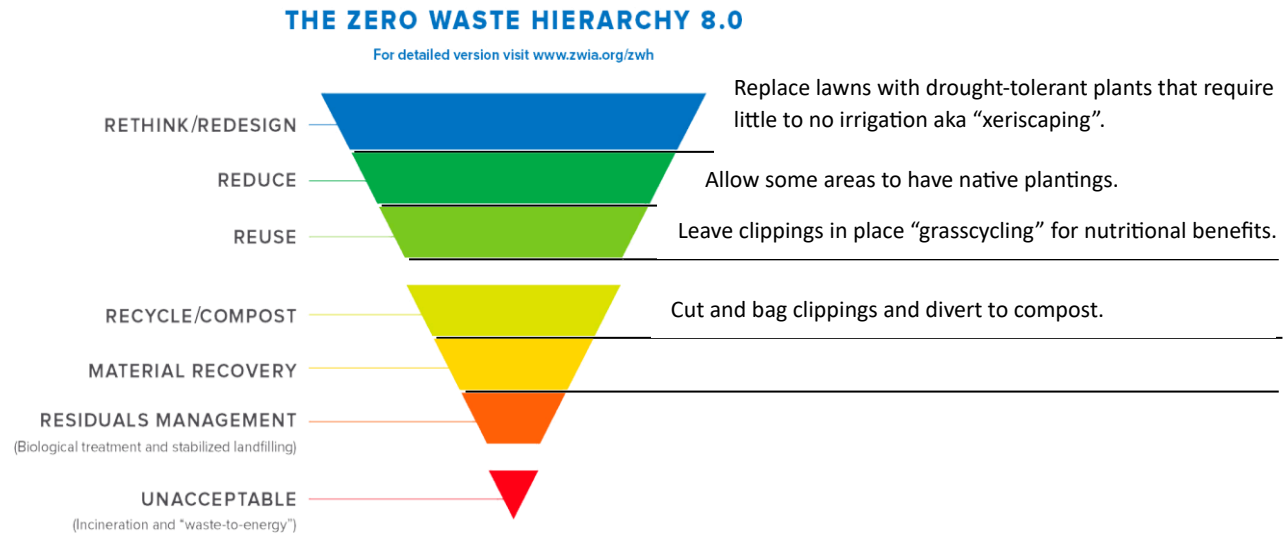
For example: Disposal of grass clippings.

What: Lawn care (process) & grass clippings (material).

Point of Generation: Outdoor spaces – Grounds.

Current practice: Cut and bag clippings and dispose in landfill.

Who to engage: Grounds Maintenance staff, management.



To start P2ZW planning, it makes sense to conduct waste audits of solid wastes, liquid wastes, and air emissions. Use the organization's environmental policy to prioritize which wastes and/or toxics to reduce first. Within the scope of the priorities, pick some processes or products that can be changed relatively easily. This is called "low hanging fruit." Create a "green team" with representatives from several areas in the organization or engage a committee of people who will be primarily affected by any changes that would be made. Brainstorm potential solutions. Make a plan to pilot test alternatives, setting criteria for success. It is possible to make changes if leadership is on board and the people most closely affected are engaged in the solution.

