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Ten Points on "Zero Waste"

Some recent correspondence with members of the new Ontario Zero Waste Coalition caused me to write up an explanation of Zero Waste, as I understand the term. My motivation was both to clarify the term and further differentiate it from other concepts that, while they may work in concert with Zero Waste (at present), are quite different. The main one is "waste diversion" -- a catchall phrase for activities like municipal recycling and composting that may be worthwhile for some applications, but that are not the same as Zero Waste and might, in some instances, work against the goals of the Zero Waste movement.

I offer an edited version below for the benefit of interested parties. The items are not listed in order of importance.

1. The Zero Waste movement is concerned with moving beyond "waste disposal" and even "waste diversion" toward a society that views waste as poor design. The idea is to design waste out of products and packaging completely.
2. Ideally, municipalities could eventually only collect and process organic materials (kitchen scraps and yard trimmings); "product waste" (all the byproducts of the consumer society) will be managed in manufacturer networks, reverse distribution systems and, in some cases, municipalities collecting material under contract from private businesses. Industry will pay for the reuse and recycling of its byproducts, as well as anything that needs final disposal, which should be as close to zero as possible.
3. "Waste diversion" (recycling, etc.) is only an interim step along the path to true Extended Producer Responsibility (EPR) wherein businesses will assume "cradle to cradle" responsibility for their products, and not externalize certain lifecycle costs onto the environment or taxpayers (which provide a kind of subsidy by absorbing industry's effluvia or carting it off). When they have to pay for the end-of-life management of their products, businesses have a financial incentive to become "eco-efficient."
4. The Zero Waste movement opposes "product stewardship" programs that look superficially like EPR but are in fact nothing of the kind. In some product stewardship programs an industry funding organization (IFO) is established that charges an advance recycling fee to collect and manage waste materials. Even if this offers the positive aspect of keeping the materials out of landfill, there's often no incentive for producers to change "business as usual" (i.e., redesign products for reuse and recycling). For consumers, the "eco fee" becomes analogous to a green tax that they have no choice but to pay, with only a vague idea that some good will come from the program. In the worst instances, the advance recycling fee rewards "free riders" that foist poorly designed products (from an ecological standpoint) on the market, yet get to wear the same green "fig leaf" as companies that are more eco-efficient. The eco-fee may even discourage companies from doing more to improve their environmental performance at each stage, because the stewardship program has simply made the environmental image problem "go away." Consumers feel the problem has been dealt with and consume in the usual way, "guilt free." Instead, true Extended Producer Responsibility is what is sought.
5. Nothing in the Zero Waste philosophy is meant to question the good intentions, sincerity and professionalism of municipal waste managers. They generally perform an excellent job doing what society asks of them. Instead, what Zero Waste proponents are doing is changing what is being asked of these professionals. Where society and its elected representatives used to ask, "How can we safely dispose of this waste?" or (more recently) "How can we divert more of this material from disposal (e.g., landfill, incineration)?" the new questions are along the lines of, "What would a truly sustainable society look like?" The answer to that question may include municipalities not handling

many waste materials at all. Local governments have, in a sense, become “enablers” of the throwaway society.

6. Even if we could design the perfect landfill that never leaks or the perfect emissions-free waste-to-energy incinerator, Zero Waste advocates would still view that negatively because the very last thing they want is make it even easier to consume and dispose of goods (“guilt free”). Something that’s often lost in the simplistic public conversation over waste diversion versus disposal is that the biggest part of the environmental footprint occurs not at a product’s disposal or recycling stage, but “upstream” during the stages of natural resource extraction, manufacturing, transportation and distribution, and during the useful life of the product. We’re facing a broader sustainability challenge, not a mere “disposal problem,” the Zero Waste advocates might say.

7. Everyone agrees that waste management infrastructure -- if it’s to be built at all -- should be constructed and operated to a high standard and comply with environmental regulations. Waste management professionals constantly try to deflect public skepticism about new waste transfer, processing or disposal systems with promises that everything will be done properly, and that there won’t be toxic emissions or odors or leaks. However, in place of better disposal infrastructure, Zero Waste promotes what some people call “industrial ecology” -- a materials and energy flow system that is harmonious with, and reflective of, natural systems, where waste is either not produced at all, or is the raw material for another product. Nothing goes to waste in nature. While government has a role as regulator and overseer, this outcome is just too important to entrust to government alone. The power of a subsidy-free marketplace can be harnessed to achieve sustainability faster and for the very long term. A Zero Waste system would include changes in the way products are made, used and delivered to the marketplace. Eco parks would spring up to efficiently share resources, including raw or recycled materials and electricity or steam.

8. Any list of preferred Zero Waste materials and systems quickly points up the (ironic) point that often the environmentally superior solution is also the cheapest. Examples include: reusable cloth shopping bags instead of disposable (or even recyclable) plastic or paper bags; refillable coffee mugs instead of paper or polystyrene cups; water consumed from the tap or via refillable containers, rather than single-serve plastic containers (often transported great distances); soft drinks and beer, etc. sold in refillable containers rather than throwaway “recyclable” containers; computers and other electronics equipment designed for easy dismantling for reuse or recycling at end-of-life; packaging made from recyclable and renewable fibres rather than plastics derived from fossil fuels (e.g., foam, film plastic, bubble wrap, etc.). The savviest Zero Waste proponents prefer not to play the game of trying to specify which materials are the best or worst; instead, they say that if we force industry to internalize its costs (and not externalize them onto the environment of ratepayers) the most eco-efficient solutions will emerge.

9. Zero Waste advocates decry the situation in which public policy often focuses only on residential waste which, while visible to voters, is only about one-third of the waste stream. The other two-thirds of commercial and industrial waste is made up primarily of recyclable materials such as metal, paper, cardboard, wood, etc. that should not be sent to landfill. It’s time, they say, for policies that consider all “three-thirds” of the waste stream.

10. The Zero Waste movement is not advocating a return to some kind of pre-industrial Stone Age. It’s not attempting to turn the clock back very far. Our grandparents who survived the Great Depression knew a thing or two about thrift and the value of reusing glass bottles and getting all the possible use out of a product. In their day, durability was prized over mere “convenience.” The throwaway society was invented in the 1950s in the era when “cheap” energy from oil and electricity seemed limitless, and the modern chemical industry was born. In an era of peak oil and greater awareness of the dangers from some synthetic chemicals, it’s time to rethink the throwaway society and replace its values with those of just two or three generations ago.

Conclusion

When we complain about the “inconvenience” of having to bring a reusable cloth shopping bag into the grocery store, or ride a bike to work (where possible), or put our kitchen scraps into a green bin for composting, what we’re really complaining about is having to change from a “waste full” way of being in the world to a “waste less” way of life. We’re like modern equivalents of degenerate aristocrats who, having fallen on difficult times, have to learn to live without servants, empty their own bed pans, wash their own soiled linens and cook their own food.

The modern throwaway society gave us a lot of convenience over the past half-century, and it also spoiled us rotten and made us careless individuals who cry crocodile tears over bleached coral reefs or disappearing rain forest even as we move into larger and larger climate-controlled homes filled with designer furniture and appliances that magazines have convinced us we must have. Indeed, we have a fetish now for these things.

Marshall McLuhan once said, "There are no passengers on Spaceship Earth. We are all crew." He made this statement in 1965, in reference to Operating Manual for Spaceship Earth (1963) by Buckminster Fuller.

That statement is something I think about every day, both the McLuhan quote and the title of Buckminster Fuller's book. Whether you're an environmental engineer, a waste recycling coordinator, a person working in industry, a consumer or just (!) an interested citizen, you are engaged, as a crew member, in the ad hoc writing of that operating manual. The Zero Waste movement is currently writing a section -- perhaps a whole chapter -- in that manual, because waste is the rough, cut-your-fingers edge where the consumer society and Earth's natural systems collide. It's where we can measure the size and depth of our ecological footprint.

Far from being just about "the household trash," Zero Waste is really about... everything.

http://blogsw.solidwastemag.com/2008/07/ten_points_on_zero_waste.html