

Recycling Online



When nothing is something – Part 1

by Roger Guttentag

Our country's attitude regarding what to do with our waste began to shift toward its modern standing in the late 1960s and emerged in the early '80s as public policy known as the integrated waste hierarchy of Reduce, Reuse and Recycle (or the 3Rs). However, by the '90s, there were many who argued there was too much attention being paid to recycling and not enough effort being made to realize the goals of reduce and reuse. Eventually, these discussions coalesced into a diverse coalition that collectively promotes that concept of zero waste (ZW).

ZW as a guiding principle

If you aren't familiar with the basic ideas that serve as the foundation of the ZW concept, I would recommend consulting the following groups' websites:

Eco-Cycle Zero Waste
GrassRoots Recycling Network
Zero Waste International Alliance

Each of these sites provides a fairly clear overview of the meaning of ZW, and each also includes additional resources such as articles, case examples and extensive links to other organizations and businesses involved in promoting or implementing ZW practices within the United States and other countries.

While each site has its own perspective on what ZW is, they all espouse the follow-

ing core ZW principles:

The flow of energy and materials through our economy should transition from a linear, "one-way" pathway to a more circular system that emulates closely how natural systems work.

The term "zero waste" does not mean that waste is never created within an economic system but that the waste created by one subsystem becomes an input for another subsystem.

The capacity of each subsystem to utilize the resources that are no longer needed or usable by other subsystems must be integrated into overall design. In addition, toxic materials are to be eliminated or replaced by non-toxic alternatives.

The economic and legal framework governing the operation of these subsystems must encourage the development of ZW designs through the application of positive and negative incentives such as extended producer responsibility (EPR).

The overall ZW operating framework needs to be supported through effective education and training programs.

The effectiveness and economic value of ZW policies and practices must be regularly evaluated through data collection.

ZW as Public Policy

Within the last two decades, a number of local governments have begun the process of transitioning from solid waste to ZW planning. The representative list given below shows communities adopting ZW plans,

including small cities like New Paltz, New York; rural counties such as Athens and Hocking in Ohio (Appalachian Ohio ZW Initiative); and large metropolitan areas:

- Appalachia Ohio Zero Waste Initiative
- City of Austin – Zero Waste by 2040
- City of Boulder – Zero Waste Master Plan
- City of Fort Collins – Zero Waste
- City of Los Angeles – Zero Waste Plan
- City of Seattle Public Utilities – Zero Waste
- New Paltz Zero Waste Initiative
- San Francisco Environment – Zero Waste

It's worth noting how these plans have evolved in the last 10 years. The initial focus was on identifying disposal flows that could be reduced through improved or expanded recycling programs, developing new programs to encourage waste reduction or reuse, adopting financial incentives such as pay-as-you-throw systems and supporting the implementation of EPR policies.

The newer plans, such as the City of Austin's Zero Waste by 2040 (adopted in December 2011), expand their scope to take into consideration such issues as jobs creation and economic development that could be stimulated by ZW initiatives. Plans from the last five years or so also investigate partnering with local businesses to encourage new markets for recovered materials, the impacts strategies have on greenhouse gas emissions and educational

programs that can be implemented to foster ZW values.

Another valuable resource is the compilation of ZW local ordinances compiled in 2008 by Eureka Recycling of St. Paul, Minnesota. This document, which can be downloaded from Eureka's site, includes a listing of web links to various examples of ZW-related local legislation as well as other tools that can be used for implementing programs in support of ZW goals.

From idea to action

The emergence of ZW as a principle and public policy is based on the evolution of our thinking on two basic issues. First is our recognition that the use of energy and materials has consequences that extend beyond the initial economic or social motivations for leveraging them. Second is the understanding we must take responsibility to capture the byproducts from energy or material utilization and, with proper care,

apply them to other beneficial purposes.

However, those of us in the waste management sector know all too well the journey from principle to practice can be a long one and often the right path is not well marked. Next month, I will take a look at some online resources that show how ZW can be implemented on the local level as well as how progress may be effectively measured.

Web Address Directory

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| Appalachia Ohio Zero Waste Initiative | tinyurl.com/RuralZW |
| City of Austin – Zero Waste by 2040 | austintexas.gov/zerowaste |
| City of Boulder – Zero Waste Master Plan | tinyurl.com/BoulderZW |
| City of Fort Collins – Zero Waste | fcgov.com/zerowaste |
| City of Los Angeles – Zero Waste Plan | tinyurl.com/LosAnglesZW |
| City of Seattle Public Utilities – Zero Waste | tinyurl.com/SeattleZW |
| Eco-Cycle Zero Waste | ecocycle.org/zerowaste |
| Eureka Recycling – Zero Waste Ordinance Resource Guide | tinyurl.com/EurekaZW |
| GrassRoots Recycling Network | grrn.org |
| New Paltz Zero Waste Initiative | tinyurl.com/NewPaltzZW |
| San Francisco Environment – Zero Waste | sfenvironment.org/zero-waste |
| Zero Waste International Alliance | zwia.org |

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