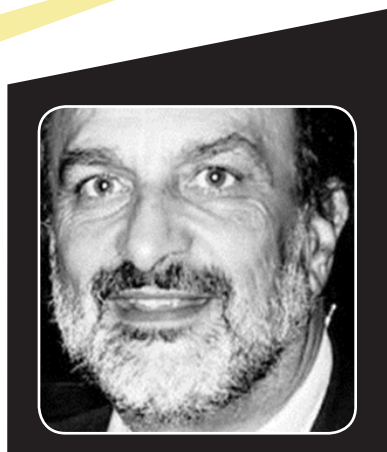


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THE ZERO WASTE APPROACH TO RESOURCE MANAGEMENT

The genesis of the zero waste movement comes from the realization that discarded materials are resources. These resources have been manufactured from a raw state with energy and labour. In the cases of metal and oil, they are irreplaceable. The value of that energy and labour is still in the commodity, even after the user has discarded it. A zero waste system is a resource management system. The process of wasting resources is against nature. In a zero waste system everything has a place before, during and after use. There is no away. In the best-designed system, the dismantling or demanufacturing would be designed into the product. The system of extraction, manufacturing, use, and disposal to incinerators or landfill will be replaced with systems that capture the material and recycle them into a closed loop system of reuse, repair, recycle/compost and redesign. Raw materials will be used as reserves. This is called the "closed circle economy" and the analysis is called a "Cradle to Cradle" design. The recognition that, disposal by burning and landfill will leave a legacy of depletion and pollution for our children; will provide the basis for new analysis and new rules. These new rules will recognize the futures right to the planets' resources and discourage wasteful and polluting practices. The reader is provided with an internationally peer reviewed definition of zero waste which involves emulating nature and designing products and packages to be compatible with the environment. Several tables are provided to show how the implementation of the zero waste approach will reduce greenhouses gases and conserve resources and create jobs. The paper covers the basic principles and the methodology to determine market values and systems design and, is original and novel, as it is the first real attempt to establish a methodology for performing a cradle to cradle analysis for discard management toward the circular economy, decoupling and culture change: three key factors in Global sustainability.

Biography

Richard V Anthony began his career in Public Administration in 1971 as a Manager of the California State University Long Beach Recycling Center. He has received a MS in Public Administration in 1974. He has worked his entire career in Environmental Program Management Positions. As a Manager, he wrote and then implemented Solid Waste plans for Fresno (1979-87) and San Diego (1987-1998) Counties. He has participated in developing zero waste plans as a consultant since 1998. He is a Founder and Member of the Board of Directors of the California Resource Recovery Association, the Grassroots Recycling Network, the Zero Waste International Alliance, US Zero Waste Business Council and Zero Waste San Diego.

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