

**DESIGN, JUSTICE & ZERO WASTE: EXPLORING
PATHWAYS TO A CIRCULAR ECONOMY
MAY 8 & 9, 2018**

DEFINITIONS AND REFERENCES

ZERO WASTE

Zero waste is both a goal and a plan of action. The goal is to ensure resource recovery and protect scarce natural resources by ending waste disposal in incinerators, dumps, and landfills. The plan encompasses waste reduction, composting, recycling and reuse, changes in consumption habits, and industrial redesign. But just as importantly, zero waste is a revolution in the relationship between waste and people. It is a new way of thinking that aims to safeguard the health and improve the lives of everyone who produces, handles, works with, or is affected by waste-in other words, all of us.¹

Zero waste means setting a new goal for how we live in the world – one that aims to reduce what we trash in landfills and incinerators to zero – and to rebuild our local economies in support of community health, sustainability, and justice.²

Zero Waste is a goal that is both pragmatic and visionary, to guide people to emulate sustainable natural cycles, where all discarded materials are resources for others to use. Zero Waste means designing and managing products and processes to reduce the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water, or air that may be a threat to planetary, human, animal or plant health.³

GREEN ECONOMY

In a green economy, manufacturing, resource extraction, and waste management must be considered together. In nature, there is virtually no waste; every output is an input for some other process. Our current economic cycles, limited largely to dollars, do not correspond to nature's biocycles and materials cycles...Production contributes to qualitative wealth. This is the ultimate meaning of service and end-use-oriented production. Wealth in a legitimately postindustrial economy can be defined only in terms of human self-development, community, and ecosystem regeneration.⁴

WEALTH FROM WASTE

In emphasizing the potential contribution of environmentally sound economic activity to the achievement of sustainable development, it is also important to note that such an approach has proved to be an important and effective means for delivering social justice and inclusion now and in the future. Many of the economic activities that have been established as environmental businesses offer employment and income-earning opportunities to people who live in socially excluded and/or economically declining communities.⁵

CIRCULAR ECONOMY

A circular economy is an industrial system that is restorative or regenerative by intention and design. It replaces the 'end-of-life' concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse, and aims for the elimination of waste through the superior design of materials, products, systems, and, within this, business models.⁶

The circular economy aims to decouple prosperity from resource consumption, i.e., how can we consume goods and services and yet not depend on extraction of virgin resources and thus ensure closed loops that will prevent the eventual disposal of consumed goods in landfill sites...In a circular economy, the consumption of raw virgin resources is reduced to optimize the use of by-products, wastes or recycling of discarded products as the primary source of resource materials and to reduce pollution generated at each step.⁷

Conceptualizing the Circular Economy: An Analysis of 114 Definitions

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How Communities Have Defined Zero Waste, US EPA

<https://www.epa.gov/transforming-waste-tool/how-communities-have-defined-zero-waste>

¹ On the Road to Zero Waste, GAIA website, <http://www.no-burn.org/on-the-road-to-zero-waste-successes-and-lessons-from-around-the-world-2/>

² What is Zero Waste, GAIA website, <http://zerowasteworld.org/zero-waste-faq/v>

³ Zero Waste Europe, <https://zerowasteeurope.eu/about/principles-zw-europe/>

⁴ "Designing the Green Economy: The Postindustrial Alternative to Corporate Globalization." Brian Milani.

⁵ "Wealth from waste: local and regional economic development and the environment." Peter Roberts. *The Geographical Journal*, Vol 170. June 2004.

⁶ Ellen MacArthur "Towards a Circular Economy." 2013.

<https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf>

⁷ "Environmental sciences, sustainable development and circular economy: Alternative concepts for trans-disciplinary research". June 2015. <https://core.ac.uk/download/pdf/82074832.pdf>