

Regenerative Economy

A regenerative economy emulates nature in terms of its efficient utilization of resources and also attempts to restore nature to its prior healthy and productive state, while producing economic output. Although the term “regenerative economy” is relatively new, these concepts are encompassed in the “Natural Step” and “Natural Capitalism”, analytical tools discussed elsewhere on this website.

Within nature there is no such thing as waste produced. Any biological byproducts or dead organisms are decomposed and recycled to become inputs to the natural system. In contrast, much of our economy produces through a linear process of steps in which there is some waste of materials and/or energy at each step towards the final product. After its useful life, the final product itself often winds up as a waste product. On the other hand, a regenerative economy would seek to design a circular process in which waste materials and energy along the intermediate stages would be captured and re-used; and the final product could eventually be re-used or recycled. The tool of “lifecycle assessment”, another industrial analytical tool described elsewhere on this website, is a useful approach; however much wider implementation is needed to approach a true “circular” economy.

The other aspect of a regenerative economy, noted above, is the actual restoration of a natural system to a prior healthy and productive state. Some of the initial efforts along these lines were taking measures to reduce air and water pollution to help restore air quality, water quality and aquatic ecosystems. More recently, we have also discovered a need (1) to restore the atmosphere by decarbonizing it (although in actuality we are most likely to reduce the damage as opposed to actual restoration); (2) to restore soils which were depleted through agricultural production and ranching which reduced soil fertility, increased chemical toxicity and reduced soil moisture and (3) to restore forest ecosystem and species from destruction caused by land use conversions and unsustainable forest harvesting. Similar efforts at regeneration are needed to restore and sustain many of the world’s important fisheries.

Based upon recent research and useful real life case study applications, there are very good discussions of important initiatives to build a regenerative economy presented in the recent book *A Finer Future: Creating An Economy In Service To Life* ¹

Regenerative Economy: Up Close and Personal

There are a number of ways in which we can do our part to help build a regenerative economy:

- (1) Reduce, re-use and recycle to do our part in promoting a circular economy.
- (2) Advocate for national standards and incentives to support a circular economy and advocate for local recycling programs.
- (3) Plant trees and vegetation, and support conservation organizations which do, to help remove carbon dioxide and air pollutants from the atmosphere, restore soil moisture and provide environmental services.
- (4) When planting household and community gardens for growing food, practice sustainable agricultural methods, including crop rotation, utilizing compost and manure and reducing use of toxic chemicals and synthetic fertilizers

¹ L. Hunter Lovins, Stewart Wallis, Anders Wijkman and John Fullerton, *A Finer Future: Creating An Economy In Service To Life* ,

