

***The Iron Law of Climate Policy: when environmental and economic objectives are placed into opposition with one another in public or political forums, it is the economic goals which win out***

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Environmental protection that might endanger the economy is not generally acceptable. Political parties place the economy high, even highest, on priority lists, as does most of the citizenry of developed countries. The Biosphere (the environment) is the source of resources that fuel the economy; consequently, placing the success of the economy over the nurturing of the environment seems unreasonable.

The human economy has done serious, *perhaps irreversible*, harm to the Biosphere. Wilson (1984, p. 121) states:

*...the worst thing that will probably happen—in fact is already well underway—is not energy depletion, economic collapse (emphasis mine), conventional war, or the expansion of totalitarian governments. As terrible as these catastrophes would be for us, they can be repaired in a few generations. The one process now going on that will take millions of years to correct is loss of genetic and species diversity by the destruction of natural habitats. This is the folly our descendants are least likely to forgive us.*

Humankind is part of the Biosphere (living systems), although it sometimes forgets and becomes apart from the Biosphere. Four types of capital form the basis of the human economy (Hawken et al. 1999, p. 4):

- *human capital, in the form of labor and intelligence, culture, and organization*
- *financial capital, consisting of cash, investments, and monetary instruments*
- *manufactured capital, including infrastructure, machines, tools, and factories*
- *natural capital, made up of resources, living systems, and ecosystem services*

The Biosphere not only provides the resource base for the human economy but also maintains conditions that favor humankind. The human economy, therefore, is a subset of the Biosphere, so the Biosphere should be given the highest priority.

The view that human technology enables humans to control nature adds to the belief that the human economy should have a higher priority than the environment. This belief appears true in the short term; however, in the long term, the universal laws of physics, chemistry, and biology will prevail.

Biodiversity loss (species extinction) is a much discussed problem, even though no significant action has been undertaken to keep the loss at a normal rate. Species are the basic operational units of the biospheric life support system, which is essential to human well being and survival. An economic value cannot be placed on a life support system that is essential to the survival of *Homo sapiens*.

Biotic impoverishment occurs when populations of a species are reduced to such small numbers that they have little or no ecological significance. A critical number is necessary for adequate biospheric function (i.e., provision of ecosystem services). Even through the five great extinctions, the process of evolution has always restored biodiversity. Although the next Biosphere may produce conditions favorable to humankind, this phenomenon is not probable. Any attempts to place an economic value on ecosystem services and the biospheric life support system should keep this probability in mind. In addition, not much is known about biospheric tipping points (where irreversible change occurs). If biodiversity loss and biotic impoverishment continue, one or more tipping points will be passed. Since tipping points cannot be identified precisely until they occur, precautionary measures to avoid them are prudent, especially since the economic consequences will be severe.

If humankind nurtured the Biosphere, a reliable supply of resources would be available for the economic system. By damaging the Biosphere, humankind has already adversely affected agricultural productivity, food security, and freshwater supplies. "We are entering a new era, one of rapid and often unpredictable climate change. In fact, the new climate norm is change. The 25 warmest years on record have come since 1980. And the 10 warmest years since global recordkeeping began in 1880 have come since 1998" (Brown 2010).

Meanwhile, the human economy, despite all the help it has received (e.g., bailouts) is not faring well and shows no sign of robust recovery. Could this possibly be because human society fails to recognize that the human economy is a subset of the Biosphere and nature's economy is dominant?

*Today we have a temporary aberration called 'industrial capitalism' which is inadvertently liquidating its two most important sources of capital . . . the natural world and properly functioning societies. No sensible capitalist would do that.*

Amory Lovins

([http://www.woopidoo.com/business\\_quotes/authors/amory-lovins/index.htm](http://www.woopidoo.com/business_quotes/authors/amory-lovins/index.htm))

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#### LITERATURE CITED

- Brown, L. R. 2010. Future at risk on a hotter planet. Adapted from Chapter 3, "Climate Change and the Energy Transition," in L. R. Brown, *Plan B 4.0: Mobilizing to Save Civilization*, 2009, W.W. Norton & Company, New York. Available online at [www.earth-policy.org/books/pb4](http://www.earth-policy.org/books/pb4).
- Hawken, P., A. Lovins and H. Lovins. 1999. *Natural Capitalism*. Little, Brown and Company, Publishers, New York.
- Pielke, R., Jr. 2010. *The Climate Fix*. Basic Books, New York.
- Wilson, E. O. 1984. *Biophilia*. Harvard University Press, Cambridge, MA.