

Transition Austin

<http://www.TransitionAustin.org>



Five Axioms of Sustainability

In his book *Peak Everything: Waking Up to the Century of Declines*, Richard Heinberg lists these five "axioms of sustainability" (pages 88-95):

Axiom 1:

Any society that continues to use critical resources unsustainably will collapse.

Exception: A society can avoid collapse by finding replacement resources.

Limit to the exception: In a finite world, the number of possible replacements is also finite.

Often, historically, collapse has meant a precipitous decline in population brought about by social chaos, warfare, disease, or famine. However, collapse can also occur more gradually over a period of many decades or even several centuries. There is also the theoretical possibility that a society could choose to "collapse" (i.e., reduce its complexity) in a controlled as well as gradual manner.

Axiom 2:

Population growth and/or growth in the rates of consumption of resources cannot be sustained.

The world has seen the human population grow for many decades and therefore this growth has obviously been sustained up to the present. How can we be sure that it cannot be sustained into the indefinite future? Simple arithmetic shows that even small rates of growth, if continued, add up to absurdly large – and plainly unsupportable – population sizes and rates of consumption.

Axiom 3:

To be sustainable, the use of renewable resources must proceed at a rate that is less than or equal to the rate of natural replenishment.

Renewable resources are exhaustible. Forests can be over-cut, resulting in barren landscapes and shortages of wood (as occurred in many parts of Europe in past centuries), and fish can be over-harvested, resulting in the extinction of near-extinction of many species (as is occurring today globally).

Axiom 4:

To be sustainable, the use of non-renewable resources must proceed at a rate that is declining, and the rate of decline must be greater than or equal to the rate of depletion.

(The *rate of depletion* is defined as the amount being extracted and used during a specified time interval, usually a year, as a percentage of the amount left to extract.)

No continuous rate of use of any non-renewable resource is sustainable. However, if the rate of use is declining at a rate greater than or equal to the rate of depletion, this can be said to be a sustainable situation in that society's dependence on the resource will be reduced to insignificance before the resource is exhausted.

Axiom 5:

Sustainability requires that substances introduced into the environment from human activities be minimized and rendered harmless to biosphere functions.

In cases where pollution from the extraction and consumption of non-renewable resources that have proceeded at expanding rates for some time threatens the viability of ecosystems, reduction in the rates of extraction and consumption of those resources may need to occur at a rate greater than the rate of depletion.

These axioms are made available courtesy of:

* Richard Heinberg (<http://www.RichardHeinberg.com>)

* The Post Carbon Institute (<http://www.PostCarbon.org>)

TRANSITION – AN OVERVIEW

THE PROBLEMS FACING US

We of the 21st century are faced with a combination of challenges that are unprecedented in human history. How we respond to them will determine the future of humanity, not just in Austin, but globally.

The End of the Age of Oil

We aren't running out of oil; we're just running out of oil that's cheap enough to extract and use without bankrupting ourselves. We're on our way to a powered-down society, in which we won't have cheap oil any more, meaning we're going to have to use less of it – a lot less.

Oil supports our life in an astonishing variety of ways, from gasoline to plastics to the pesticides used to grow our food. It helps us grow our food, then it transports it to our table. That's all winding down, and we need to realize and accept that fact – and then plan how we're going to respond to it.

Global Climate Change

The climate of Earth's atmosphere is changing. We've all heard of global warming; but there are other aspects to the problem, too. For example, the warming is melting fresh water off the Arctic ice pack; as that fresh water spills into the Atlantic, it could slow or even stop the Gulf Stream, which would (among other things) bring a new ice age to Europe.

Can we stop it? Good question. And if we can't, how can we plan to live in a world in which global climate change is a fact of life?

The Global Financial Meltdown

The world banking system can no longer support the demands placed on it. No matter what the cause, the result is that meltdowns like the one that happened in the fall of 2008 are more and more likely. How can ordinary people live our lives when the financial system isn't there so support us any more?

WHAT IS TRANSITION?

Transition is a worldwide movement started in Kinsale, Ireland, and Totnes, England, by Rob Hopkins. The objective of Transition is to help people become aware of the problems that humanity will be facing in the next 30 years, and then to find and implement creative ways of facing and overcoming them.

The fundamental book of the Transition Movement is *The Transition Handbook* by Mr. Hopkins, published in 2008. It describes concrete approaches that we can take to prepare for the inevitable changes, using the experience gained in Kinsale and Totnes as examples.

The Transition Approach

At heart, Transition asks, "How can we prepare ourselves to live, and even thrive, in the world that's coming? How can we change our society so everyone can live healthy, satisfying lives, even with the problems we're going to face?"

Transition is about devising, and then implementing, solutions to these problems that we can get started on now. It means preparing ourselves to create a sustainable, resilient culture that can support us into the future. This means, among other things, re-localization: living in smaller communities where everyone is closer to the places where they work, and the places where their food is produced.

What Is Transition Austin?

Austin's implementation of the Transition concept is being led by Transition Austin, a certified Transition Initiative dedicated to guiding Austin to be a clean, safe, successful city during and after the powerdown we all face in the not too distant future.

For more information about Transition Austin, go to <http://www.TransitionAustin.org>.