Dreaming the Future Can Create the Future

Kenny Ausubel Bioneers

reaming the future can create the future. We stand at the threshold of a singular opportunity in the human experiment: To reimagine how to live on Earth in ways that honor the web of life, each other and future generations. It's a revolution from the heart of nature—and the human heart.

Then again, in the immortal words of Yogi Berra, "The future ain't what it used to be."

We're entering an age of nature. It calls for a new social contract of interdependence. Taking care of nature means taking care of people, and taking care of people means taking care of nature.

The ecological debt we've incurred is dire. We've precipitated climate change that's within one degree centigrade of the maximum temperature in the past million years. Leading scientists say we have ten years at best to make a massive global shift, an extreme carbon makeover. It's show-time.

We're entering a drastic period of creative destruction. We've already begun to trigger what some ecologists call "regime shift," irreversible tipping points. Global warming is getting all the ink, but other intimately interdependent issues equal its magnitude: the mass extinction of 30 to 50 percent of Earth's biological and cultural diversity—freshwater shortages that will lead to wars, the universal poisoning of the biosphere, and the greatest extremes of inequality in modern history, a world that's 77 percent poor.

We're going to be busier than a cat in a room full of rocking chairs.

Periods of creative destruction also present transformative opportunities to make the world anew. These tectonic shocks are evolutionary exclamation points. They release vast amounts of energy and resources for renewal and reorganization. Novelty emerges, and small changes can have big influences. It's a time of creativity, innovation, freedom and transformation.

The grail is resilience—strengthening the capacity of natural and human systems to rebound—or to transform when the regime shifts. As Charles Darwin said, "It is not the strongest of the species that survive, nor the most intelligent, but the ones most responsive to change."

The driving force behind this unprecedented globalized collapse is financial. Author, economist and futurist Hazel Henderson has characterized conventional economics as "a form of brain damage." We're experiencing its devastating effects right now. It rationalizes the insatiable predation of nature and people, while disappearing environmental and social costs from the balance sheet. It concentrates wealth and distributes poverty. It exalts greed and self-interest. It conflates free markets with democracy. It merges corporations and the state. Its foreign policy is empire. It has been a catastrophic success.

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*Photo courtesy Dave Kimble **Photo courtesy Pierre Holtz, UNICEF

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Cycle of an empire collapse

As political commentator Kevin Phillips has chronicled, every major empire over the past several hundred years has undergone a depressingly predictable cycle of collapse, usually within 10 to 20 years of its peak power.

Peak power

The hallmarks are always the same:

- the financialization of the economy, moving from manufacturing to speculation;
- very high levels of debt;
- extreme economic inequality; and
- costly military overreaching.

The Dutch, Spanish and British empires followed this pattern. The US is repeating it. But as J. Paul Getty said, "Every time history repeats itself, the price goes up."

Yet there's an even deeper story behind empire crash.

Energy is a nation's master resource. Each empire has had an idiosyncratic ability to exploit a particular energy source that propelled its rise to economic power. The Dutch learned how to tap wood, wind and water. The British Empire fueled its ascendancy on coal. The American empire has dominated with oil.

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The cautionary tale is this: No empire has been able to manage the transition to the next energy source. The joker in the deck this time around is the climate imperative to transition off fossil fuels worldwide. It requires the most complex and fiercely urgent passage in the history of human civilization. Nothing like it has ever been done.

Just as economics is driving the destruction, it needs to power the restoration. The charge is to transform the global economy from a vicious cycle to a virtuous cycle.

Real wealth creation is based on replenishing natural systems and restoring the built environment, especially our infrastructure and cities. It's based on investing in our communities and workforce. It's been shown to work best when done all at once. Restoration is an estimated \$100 trillion market. There's plenty of work to do, plenty of people to do it and abundant financial incentive. And every dollar we spend on pre-disaster risk management will prevent seven dollars in later losses.

The question is: Will we change our old bad habits fast enough to beat forbidding odds?

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A big bang of brilliant, effective work is meeting with unprecedented receptivity. Yet still the pace of destruction outstrips our response. Real success will require a giant leap across the abyss on visionary currents of bold action. It will take skillful means. It will take a big heart. And in times like these, as Albert Einstein said, "Imagination is more important than knowledge."

Many of the solutions are already present. Where we don't know what to do, we have a good idea what directions to head in. Game-changing technological and social innovations are surfacing constantly. Global digital media can spread them at the speed of text messaging.

At the forefront is biomimicry, the art and science of mimicking nature's design genius. As Janine Benyus observes, nature has already done everything we want to do, without mining the past or mortgaging the future. There's nothing like having four billion years of R&D at your back.

A riptide of capital is mainstreaming biomimicry and clean tech, now the third-largest domain of venture capital investment. In Silicon Valley, the "watt-com" era has dawned. Compared with hundreds of billions for the

Real success will require a giant leap across the abyss on visionary currents of bold action. It will take skillful means. It will take a big heart. **And in times like these, as Albert Einstein said:** entire Internet market, the worldwide energy market is \$6 trillion. Google just put forth a \$4.4 trillion Clean Energy plan. By 2030, it proposes to slash fossil fuel use by 88 percent and CO2 emissions by 95 percent.

The smart money is hot on the trail of the next industrial revolution. There's mounting pressure on Uncle Sam because government policies make or break markets.

But for now, the real action is happening at local and regional levels.

"Imagination is more important than knowledge."

Photo courtesy of the Library of Congress

California:

Passed the world's first comprehensive climate change legislation, and is gearing up to install 12.5 sq. mi. of solar panels.

Massachusetts:

Passed the nation's most farreaching package of renewables and green jobs legislation.

Texas:

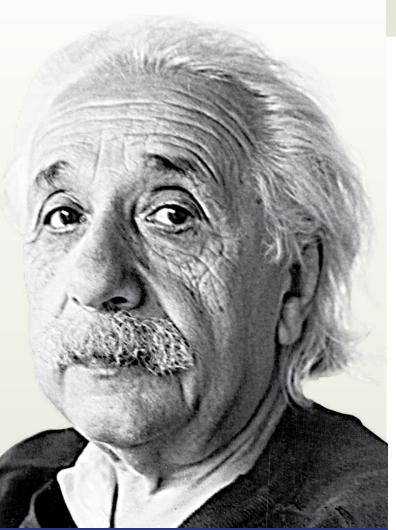
Is about to build the biggest wind installation ever, surpassing Germany as the world leader.

California, the world's sixth-largest economy, passed the world's first comprehensive climate change legislation and is gearing up to install 12.5 square miles of solar panels—12 times the previous largest.¹ In 2008, Massa-chusetts passed the nation's most far-reaching package of renewables and green jobs legislation.² Texas just finished building the biggest wind installation ever,³ surpassing Germany as the world leader, and California already has plans to build an installation double its capacity.⁴

Breakthrough technological innovations have to spread rapidly, as do the government policies that drive these markets. Of equal importance are social innovations and political regime change.

Michael Kinsley of Rocky Mountain Institute has said, "We've got to go from success stories to systemic change." It's going to take epic cooperation among

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business, government and civil society, and among nations. We need to play big and aim high. It begins with a dream. In the words of Janine Benyus, "The criterion of success is that you keep yourself alive, and you keep your offspring alive. But it's not your offspring—it's your offspring's offsprings' offspring ten thousand years from now. Because you can't be there to take care of that offspring, the only thing you can do is to take care of the place that takes care of your offspring."

I'd like to close with the words of David Oates from an essay called "Imagine" in *High Country News*.⁵

A vision predicates an imaginative leap: that we are—after all—fundamentally connected to each other—that my fate and happiness are not private matters only, but a shared project. A tax cut takes no imagination: It's a few more bucks in your pocket. But seeing one's ownership in a community, one's own face in someone else's child, that takes imagination.

Imagine—combining our resources to relieve suffering and to open up dead-ends of poverty and hopelessness. Imagine knowing that our fate is each other.

Imagine: knowing that our fate also swims with the salmon and grows with the trees.

Imagine living beyond yourself—finding the thing you're good at and in love with, even if it doesn't pay so well. That would be like coming back to life, wouldn't it? It would be like grace.

Imagine.

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