

PAUL R. EPSTEIN AND FRANK I. SMIZIK



It's possible to be clean, green, and profitable

By Paul R. Epstein and Frank I. Smizik | April 21, 2006

THE CLIMATE is changing; we know that. And the change is caused by global warming from burning fossil fuels. It's time we turned to solutions, and New England can take some bold steps.

Many forces are lining up to drive a change in energy policies. Oil and gas prices are climbing; conflicts in supply regions are multiplying. Oil will run out at some point, and climate volatility is sending shivers throughout insurance and investment communities.

Insurers, banks, and pension and mutual funds face new, huge, and uncertain risks. Hurricane Katrina, which spread misery, disease, and social disruption, marks a turning point. As insurers and coastal communities brace for a third consecutive dreadful storm season -- projected by all four of this nation's hurricane prediction centers -- the unmanageable is no longer unimaginable.

The financial sector is the central nervous system of the global economy. It is feeling the pain of catastrophic weather events around the world, and its signals can ripple through economies and affect public policies that can enable a real shift in investments.

Disaster damages -- overwhelmingly weather-related -- rose exponentially in the past two decades. Before 1990, annual losses were about \$4 billion a year, with \$400 million insured. Last year, losses were \$225 billion, with \$83 billion insured. That is a two-hundredfold increase in payouts. More extremes are hitting the United States, Europe, and Japan.

Some of the losses are because of increases in coastal populations, real estate prices, and insurance penetration. And there are more frequent and intense extremes of all types and novel events, such as hurricanes hitting Brazil, Spain, and Portugal -- areas that never considered buying hurricane insurance.

Insurers and reinsurers are reacting. The first response is defensive: higher premiums, wider exclusions, and hedging their bets. But the largest companies, like Swiss Re, Munich Re, and A.I.G., are also trying to reduce risks and stabilize the climate. Large banks, such as JP Morgan Chase, Goldman Sachs, Bank of America, and Citigroup, are crafting guidelines for investing in nonpolluting industries, and city and state pension funds are reexamining their risks and resetting their compasses to seek new opportunities. Meanwhile, Standard and Poor's, Moody's, and Fitch are reexamining the way they rate companies, deals, real estate, projects, and nations, in light of climate change.

All are taking a hard look at General Motors and Ford, stumbling, in part, because they failed to keep up with consumer demands for smaller, efficient cars. In 2005 venture capitalists invested more than \$44 billion in "smart technologies" for the grid, hybrids, solar, wind, tidal, wave, and geothermal energy. It's becoming cool to be green, and the trick is to be clean, green, and profitable.

In the absence of a national plan, we need local and regional plans for safe, healthy, and economically sustainable measures to address electricity, buildings, and transport. To make this happen, capital markets need seminal policy signals from the public sector.

Here's a suggestion: While we're formulating plans, let's start with "no-regrets" solutions, with multiple co-benefits, such as "green buildings." Estimated health and performance savings for workers and students are in the hundreds of billions of dollars. Geothermal systems that tap into the heat of bedrock -- such as at Trinity Church and the new Audubon Center in Boston and the American Repertory Theater in Cambridge -- let buildings derive 80 percent of their heat free. Better insulation, lighting, and ventilation have immediate paybacks. Since 70 percent of Boston's greenhouse gas emissions come from buildings, a change in new construction and retrofitting of old could make a significant difference in energy bills and security, and create jobs. How can we make this happen? Green, healthy, and affordable housing in Boston -- that resonates with Mayor Thomas E. Menino's chief concerns. Green, clean, high-end

housing also sounds good.

Cities and states can donate land, provide tax abatements, and invest their pension plans. In the Bay State -- where renewable energy and energy-efficient initiatives have spawned 10,000 new jobs -- the Massachusetts Technology Collaborative can provide seed money. Insurance companies can alter building codes and reduce premiums to reward green developers. Banks and pension and mutual funds can help jump-start infant industries and help others make the shift to healthy practices. Guided by community development corporations, green buildings can use wood from sustainably nurtured forests, nontoxic materials, and biodegradable "plastics."

California is way ahead on solar and automotives. New England's academic prowess and progressive spirit can help it create another center for clean growth. With the proper incentives, the clean-energy transition can be the engine of growth for the global economy and provide the underpinning for a healthier, safer, and more peaceful world.

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