

“From Green Energy to Green Jobs: Rebuilding Local Economies”

Plenary lecture, “Live Green” conference, Manchester, Vermont, September 11, 2010

The following is an abstract of the talk given at Manchester. The actual talk included a slide show; this abstract covers the basic content of the slides and some amplification.

Part I: 2050

Sustainability, or better the lack of it, is in my view *the* problem of the twenty-first century. This is not to say that other global problems are unimportant; they are. But other global problems, including pervasive poverty and violence, are increasingly affected by sustainability. Because the world’s ecosystem is increasingly incapable of supporting the world’s human population, we face a growing series of interrelated crises.

To give you a sense of how severe the impending train wreck is, let me start with a few pictures of life during the next few decades. Global warming is a temperature problem, especially bad in the polar regions, but it is also a precipitation problem. Some areas of the world will experience increased dryness, but others will become wetter. Weather will become increasingly unstable, and severe weather events will rise. Those events will not be spread evenly on a geographic and demographic basis. People living in coastal regions and low-lying areas near water, and especially the poor in those regions, will bear the brunt of the severe weather. Examples such as Hurricane Katrina and the flooding in Bangladesh and Pakistan will multiply. But droughts will also affect food shortages, and the other side of the water problem will be severe water shortages. By 2050, fifty-four countries will face severe water shortages. As a result, water management and ownership will become an increasingly tense and politicized topic. Coupled to the shortages will be ongoing problems with water contamination from mining, nuclear energy waste, natural gas fracking, and many other industrial activities.

In our region of the country, the climate will gradually change by the end of century. A projection by the Union of Concerned Scientists suggests that the climate of upstate New York and Vermont will look something like that of southern Virginia to South Carolina by the end of the century. In the longer term, many states and countries will be underwater, including Florida, the Netherlands, and Denmark, if all the land-based ice melts. Many seafood stocks and coral reefs will collapse, and over 1 million species will become extinct. As peak oil and peak natural gas set in, prices for conventional fossil fuels will increase. One response is likely to be increased nuclear energy, which will establish a wide range of increased risks of pollution and terrorism.

Meanwhile, about three billion people will be added to the world’s population by 2050. Many of those people will live in coastal regions of the less developed countries of Asia and Africa, and many of them will inhabit cities—or, to be more precise, shantytowns in already poor cities. In Mike Davis’s book *Planet of Slums*, we get a sense of what this future will look like for many of the Earth’s inhabitants. In some of the shantytowns, any form of police and government stability will become impossible, and

the main institutions will be evangelical churches and mosques, gangs, and informal microbusiness enterprises.

Furthermore, there will be a general transition of economic power from Europe and North America to Asia. For better or for worse, the “West” will be increasingly unable to guide global environmental and energy policy. The policies that emerged from our country after September 11, 2001, were very short-sighted indeed and a tremendous lost opportunity. Instead of moving in a direction of military expansion to secure fossil-fuel resources, we could have engaged in a dramatic green transition to energy independence. In the eyes of many countries throughout the world, we lost not only an opportunity but much legitimacy. Both the decline in legitimacy and the shift in wealth to Asia mean that political opportunities for the U.S. to shape a global green transition have weakened. Not that the U.S. has proven to be much of a leader in that regard. Global carbon emissions could well grow over levels that exist today, sending the world’s ecology into a spiral of global warming. In the very long run of centuries, it is possible that the world will become subject to the “Venus syndrome,” in which the surface temperature becomes so hot that the oceans boil and all life ceases.

But in the short run of the next few decades, we are more likely to see a slow and steady decline, an uneven collapse in which the world’s wealthy countries and middle classes manage to maintain a reasonable quality of life, while the pressures on resources inflict increasing misery on the world’s poor. Protecting the wealth from the poor will require increasing levels of surveillance, breaches of traditional notions of civil liberties, and heightened conflict, even warfare, over limited resources. There is great risk for democratic institutions to be increasingly weakened. This is far from the optimistic vision of world development that characterized the hopeful projects of the twentieth century, but it is the path that we are headed down.

Part II: Policy Reform

In the United States at the federal government level, we are faced with an almost complete policy failure. Since 2000, there have been some reforms that address environmental issues, but the United States has not made progress on fundamental changes such as a carbon tax or carbon trading and a national renewable electricity standard. Even a supermajority of Democrats elected in 2008 with the slogan of “change we can believe in” has managed to stumble due to protracted lobbying of the U.S. Senate. The fossil-fuel industry has produced various smokescreens of climate-change skepticism, astroturf social movements that deny basic scientific research and socioeconomic projections, and political candidates who take their marching orders on environmental policy from their industrial sponsors.

At the state government level, there are more hopeful signs, but they are uneven. Some of the states have shown great leadership in building policies for the green transition, but mostly the states are net importers of coal and other fossil fuels. The coal-producing states and the states with oil drilling and refining operations have taken another direction. As a result, the country is increasingly divided. The growing division between blue and red politics is often overlaid on a division between green and brown politics (brown as in brownfields or anti-green sentiment).

In our report on clean-energy industries and green jobs, we tracked some of the more promising developments that are occurring at the state government level. Demand-side policies include renewable electricity standards, building efficiency standards, net-zero energy building targets, system benefits charges on utility bills, renewable fuel standards, weatherization and retrofitting policies, and regional greenhouse gas policies. But we have argued that demand policies are not enough, and we have tracked the corresponding supply-side policies that enable green business development and green jobs development as well. For example, a state may undertake a green transition by importing its wind turbines and light-rail systems, or it may do so by encouraging local manufacturing as well. We track some of the emergent new green manufacturing and industrial clusters that are emerging across the country. These clusters are important for many reasons, but among them they provide better jobs than the lower-end service jobs in the weatherization industry, and they also provide a source for a growing network of industries that can provide a political counterbalance to the fossil-fuel industry.

Behind these policies we can also detect an underlying economic development strategy of import substitution. At one level, a state that produces its own renewable energy instead of important coal and natural gas provides a plug on the leakage of funding that is flowing out of the state economy. But at another level, if the state couples its renewable energy policy with local manufacturing and industrial development, it can multiply the effects of the import-substitution policy. Having both levels of the green transition in place will make a difference in the long-term capacity of a regional economy to maintain a standard of living that it desires, but it will also help build the political will to keep a fire lit under the contentious politics of the green transition.

Another aspect of the green transition is economic localism, or support for locally owned, independent businesses. Not all of those businesses are especially green, but because the owners are local, they are available for conversation and more amenable to pressure than distant owners. Of course, local, sustainable food is the leading sector in the area, but there are also many locally owned, green businesses in the retail, services, and energy sectors. A great example (many slides here) is the retail business that combines the sale of new products with used goods and repair of existing ones. The used goods sector can also compete on prices with the global supply chain that supports big-box stores. So, in my view, another piece of the policies for a green transition includes support for the locally owned, independent business sector, especially businesses that are willing to commit to greening their operations and contributing to regional efforts to build a local living economy and to network those efforts with businesses and consumers throughout the world.

Part II: A Vision

I want to end with a vision of what the twenty-first century could be. Those of us involved in social movements and reform efforts need to keep the vision alive, even if we watch with disappointment and depression at the continual failure of our political leaders to respond proactively to the great sustainability crisis.

First, in the energy sector it is technically possible, even if slightly more expensive in the short term, to make a transition to energy conservation and renewable energy as the principal sources of energy for the future. The transition requires long-term

changes in how we think about buildings, global supply chains, transportation, urban design, personal consumption, and many other aspects of our lives. At its best, the energy transition also includes opportunities to increase local public ownership in the tradition of green public utilities such as Seattle City Light and the Sacramento Municipal Utility District. With respect to transportation, we have opportunities not only to begin a short-term transition to plug-in electric vehicles with biofuels but a long-term transition to hydrogen and battery-powered vehicles with the energy ultimately supplied from renewable sources. But we also need to look at opportunities for ride sharing, car sharing, public transportation, compact urban design, walking, bicycling, and simply just not traveling as much. In short, the energy transition requires thinking deeply about how we organize the basic material culture in which we live, and it provides opportunities to redesign systems that restore the vitality of public ownership and local government that have been lost since the 1970s.

In the area of food, there are tremendous opportunities already flourishing around sustainable local food networks, independent food retail outlets (such as cooperatives), gardening and community gardening, and fair trade for nonlocal food. Much of the food transition to date has been limited to the middle class and positioned as a luxury good, but there are many opportunities to redesign this transition to include opportunities for low-income citizens and a strengthening of civic culture and public spaces. Farmers' markets, community gardens, food cooperatives, and other institutions can and should be sites for public gatherings, political debates, and the incubation of reform politics.

Finance, media, and retail are also crucial elements in the green transition. We need to reclaim local ownership in all sectors by moving our money to credit unions, strengthening community banks, developing new investment opportunities for local economies, shifting the media to a nonprofit and public benefit model, and rebuilding local retail. There is a need for creative new ideas, such as financial instruments that provide choices in our 401K and IRA funds that enable money to be channeled back into local living economy institutions. Shorebank, for example, offers a local green credit card that channels 50 percent of the proceeds into local environmental projects, and it also offers targeted deposits that support local, green businesses. We need much more of this, and at a level and scale that taps into the trillions of dollars in retirement funds.

Finally, we need a fire wall between the political and economic system that begins with campaign finance reform. We need to continue to experiment with new models of elections, such as those that weaken partisan politics by having final elections take place between the top-two candidates of an open primary, regardless of party. Ultimately, we cannot have a green transition unless we have a functioning democracy. The early neoliberals (called conservatives in the U.S.) were concerned that too much government intervention in the economy would lead down the road to totalitarianism, but they missed the much graver danger that too much economic intervention in the government has led to a corporate oligarchy. The slow greening of the corporate oligarchy may bring about a long-term transition, but the high level of influence and economic power of the fossil-fuel companies has meant that reforms continue to appear at a pace of too little, too late.

In short, I worry deeply about the train wreck that is ahead. The twenty-first century may be a history of slow but steady decline, but ultimately the instabilities caused by the conjunction of changing geopolitical power, climate-based ecological changes, and the growing impact of consumption and population suggest that the future that we are

leaving for our children and grandchildren will be one of warfare, chronic toxic exposure, and declining quality of life. It doesn't have to be this way, and we each can find a place in the many movements for reform that are growing around us. Even if we are not successful, future generations will look back on some of us as having had the courage to try to make a difference.