

Foreign Policy

Think Again: The Green Economy

By Matthew E. Kahn

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Going green has finally gone mainstream, and politicians from London to Seoul are spending billions on clean technologies they say will create jobs. But unless we are all willing to risk a little more pain, the green revolution could founder before it ever really starts.

“Going Green Will End the Recession.”

No way. Vowing to pump \$150 billion into green technology over the next decade, U.S. President Barack Obama has made big promises about his environmental agenda. “It will also help us transform our industries and steer our country out of this economic crisis by generating 5 million new green jobs that pay well and can’t be outsourced,” he said in November.

British Prime Minister Gordon Brown has similarly called for an international “Green New Deal” to create a “low-carbon recovery.” The United Nations wants a full 1 percent of global GDP to go to environmental initiatives. Rich countries such as Canada, Japan, and South Korea are obliging, spending billions to promote ecofriendly projects and green businesses.

Even the U.S. Congress is considering a range of measures to reduce greenhouse gases—from regulatory mandates, such as raising vehicle fuel economy or requiring electric utilities to produce more of their power from renewable sources, to carbon taxes and a cap-and-trade system for electric utilities.

Many of these ideas are very much worth pursuing for environmental reasons. But it’s doubtful they offer a double dividend of helping to jump-start the economy. For one thing, the global financial crisis is fundamentally about different issues: the popping of housing and credit bubbles from St. Petersburg to San Francisco, the associated implosion of a highly leveraged international banking sector, and the resulting fallout on real economies. These pressing problems won’t be solved by switching to hydrogen-powered cars or installing solar panels on every roof.

Second, let’s be honest: Anti-carbon regulations will simultaneously create and destroy jobs. Take the United States: Given the country’s current reliance on cheap, coal-fired power plants, carbon caps will translate into higher electricity prices. (How much higher remains an open question.) Older manufacturing firms—especially in energy-intensive industries such as petroleum and coal products, paper, cement, and primary metals—will face higher costs of doing business, and this may lead them to shut down or seek international locations where electricity prices are lower and carbon regulation is less stringent.

In the long run, a little creative destruction will likely be a good thing. The same regulations that might kill jobs in smokestack industries will act to stimulate a host of new manufacturing opportunities, ranging from energy-efficient household appliances to solar panels to energy-efficient vehicles. Even former U.S. Vice President Dick Cheney might consider buying a fuel-efficient vehicle if gas prices rose enough.

But don't count on clean technology to pull us out of the doldrums. The green revolution won't happen overnight.

"Governments Should Promote Alternative Energy."

It depends how. Governments have a dreadful record when it comes to picking winners. Consider the U.S. Energy Policy Act of 2005, which required that gasoline sold in the United States be mixed with increasing amounts of renewable fuel. As intended, this regulatory mandate created large demand for ethanol made from corn (which was already heavily subsidized). Corn Belt senators were thrilled, but it made environmentalists and economists queasy—because corn-based ethanol may actually create more carbon over its life cycle than conventional gasoline. Now that oil prices have collapsed, subsidizing this fuel source makes little economic sense. With newly built ethanol plants already rusting across the Midwest, U.S. taxpayers are left propping up an industry that could never survive on its own.

Ethanol is hardly a special case. Take the historical track record of Japan's powerful Ministry of Economy, Trade, and Industry, which was set up to aid particular economic sectors. Economists Richard Beason and David Weinstein found that this supposed engine of Japanese success had actually been financing losers and that government aid did nothing to increase productivity between 1955 and 1990.

Why are governments so bad at this game? Because the future is hard to predict. Better to avoid top-down mandates (i.e., Soviet five-year plans) and instead encourage individual experimentation. A decentralized approach would let firms and households identify the most efficient ways to reduce their carbon footprints. Instead of handing out subsidies for technologies that may or may not succeed, governments should level the playing field by forcing polluters to pay the true social costs of their consumption of dirty fuels. When my local power plant fires up its boilers, it should pay for the greenhouse gases it emits as well as the cost of the coal. A carbon tax or a cap-and-trade program would do the trick.

"China's Out-Greening the United States."

Not on your life. Some pundits, such as *New York Times* columnist Nicholas Kristof, have suggested that China, with its foray into hydrogen fuel cells and tough new fuel-economy standards, threatens to leapfrog the United States in going green.

We should be so lucky. The unfortunate reality is that China has extremely high air and water pollution levels. Yes, the average Chinese person's greenhouse gas emissions are much lower than the average American's, but this gap is closing fast, as private vehicle ownership and electricity consumption are rising sharply in China. In 2001, there were 1.5 million vehicles in Beijing. By August 2008, the city's vehicle count had grown to 3.3 million. If the Chinese began consuming like Americans, resource pressures would go up dramatically. Geographer and historian Jared Diamond of the University of California, Los Angeles, warns: "Oil consumption would increase by 106 percent, for instance, and world metal consumption by 94 percent. If India as well as China were to catch up, world consumption rates would triple."

When it comes to producing clean, renewable power, the Middle Kingdom is falling ever further behind. With its ample coal supplies, China can meet its soaring electricity demand only by opening more coal-fired power plants—approximately three or four per month. Even with the best available technology, each megawatt-hour of power created by a coal-

fired power plant creates a minimum of 1,600 pounds of carbon dioxide. In total, China is now pumping more than 6 billion tons of carbon dioxide into the Earth's atmosphere each year, to say nothing of the sulfur dioxide and particulates that pose a major public health threat. It's not too great an exaggeration to say that convincing the Chinese government to change this equation ranks among the greatest challenges facing humanity.

Indeed, it would be a mistake to view the global competition to master green technology as a zero-sum game. Perhaps the best hope for taming China's belching coal plants is for rich countries, including the United States, to master a specific carbon sequestration technology—such as injecting carbon dioxide safely underground or beneath the ocean floor—and then give the blueprints to the Chinese. If China grows greener, the world will benefit.

“Europe Has Shown That Green Is a Job Creator.”

Not yet, though an optimist can certainly find success stories. Denmark, for example, has gotten a PR windfall from its status as the world's leading exporter of wind-turbine technology. Spain has offered generous subsidies to renewable electricity producers. Germany has poured billions of euros into solar power (though critics of the subsidies point out that the price of silicon has skyrocketed as a result, pushing up the cost of solar power in sunnier parts of the world).

Setting aside the inherent problems with governments picking winners, the world recession may tell us whether these “successes” are here to stay. Last year, amid soaring energy costs, Germany and Spain cut back on their solar subsidies; now, many producers are struggling to survive on their own. An optimist would argue that such infant industries need special protection from government while they are young but will learn by doing and develop into more competitive businesses that become cost effective in the global marketplace. But with credit for capital-intensive projects increasingly hard to come by, this theory is being painfully tested.

No matter what, such government subsidies are costly. Denmark may be a clear success, but how many green failures have there been in Europe? Repackaging an old-fashioned industrial subsidy as a “green jobs” stimulus may be not so much an environmental plan as a politically correct way for governments to transfer resources to a favored sector. European carmakers have been asking for such a handout, ostensibly to help them build more fuel-efficient vehicles. Cynics question their sincerity.

Let's also not forget that governments face a budget constraint. To pay for large strategic subsidies, someone's taxes will eventually have to be increased. Higher taxes distort consumption and investment decisions. Households respond to lower after-tax wages by working less, and companies respond to higher corporate income taxes by investing in fewer new projects. The net effect is a less robust economy.

“Green Cities Are Overhyped.”

Actually, no. By the year 2030, 60 percent of the world's population will be living in cities. These urbanites will be more productive, healthier, and happier if they are living in clean, livable cities. This is where the jobs of the future will be.

In the 19th century, Karl Marx and Friedrich Engels bemoaned that capitalism gave us such nasty places as Manchester, England. Today, it's green cities—with their clean air, parks

and trails, and transit-oriented development—that are winning the capitalist game. Attracting and retaining skilled workers is the key to long-run growth—just ask the chamber of commerce in gritty Detroit, where there are homes for sale today for just \$13,000. Meanwhile, once sooty Pittsburgh, New York, and London have reinvented themselves as high-end places where the footloose and educated want to live and work.

Today, all over the world, cities with high quality of life and high environmental quality feature higher housing prices and less out-migration of skilled workers than nearby cities with a lower quality of life. Stockholm is a good example. The Swedish capital enjoys physical beauty and perhaps as no accident has established itself with a synergistic combination of universities, cultural centers, and financial headquarters. Across Europe, high gasoline taxes and the absence of urban fringe land for development have encouraged compact development around historical city centers and the reliance on high-quality, fast public transit.

In China, home to some of the most polluted cities in the world, market forces are revealing the demand for clean air. Beijing's ambient air pollution levels, for instance, are more than four times worse than in Los Angeles. But within the sprawling city, there are areas with high air pollution levels and other areas with much cleaner air. My own research has documented that home prices for standardized housing units are significantly lower in areas of the city with polluted air and little green space. So, even in a country where economic growth seems to trump all, the skilled are voicing a preference for green.

“Green-Collar Jobs’ Is Just a Marketing Slogan.”

Yes. But what is being sold? Take this multiple-choice test:

Who is a green-collar worker?

- A. A trucker who delivers gas to a gas station without ever suffering a spill
- B. A scientist doing research on improving hybrid battery technology
- C. A home weatherizer who makes house calls helping families increase their energy efficiency

No wonder estimates of the employment impact of Obama's energy plan vary so widely. Defining a “green” job is tricky. The trucker could have caused a disaster by making a careless mistake. His extra effort will not be written up in the newspaper, but such little decisions help to protect us from fires and pollution. The scientist has a shot at devising a great new technology that could both foster economic growth and decarbonize the economy. Finally, many households and firms are unaware of how much money they are wasting on electricity and heating bills. A team of home weatherizers could cost-effectively plug these holes, creating jobs, lowering energy bills, and reducing greenhouse gas production in the process.

But what if these three workers approached the government for a subsidy and the president could only choose one? Which is the greenest job of the three? The president would be forced to take a stand. Does he prioritize a) protecting public health, b) betting on the next generation of green technology, or c) minimizing wasteful energy consumption?

“Stopping Climate Change Will Boost Economic Growth.”

Unproven. An optimist would hope that the carbon tax incentives or cap-and-trade policies needed to stop climate change would accelerate the development of the hydrogen economy, offering the win-win of cheap, green power. And, of course, we have our children to worry about. Nicholas Stern of the London School of Economics, who has forcefully argued that the benefits of devoting significant resources to stopping climate change exceed the costs, is asking us to sacrifice now (perhaps up to 15 percent of current consumption) so that future generations will suffer less.

This may well be a good trade-off. But it is unlikely to stimulate growth. Carbon mitigation investments will not be costless, and other valuable investments will be displaced by the resources we devote to stopping climate change.

Meanwhile, the arithmetic of global warming is only getting more daunting. Imagine if the American Dream went global, if 8 billion people each owned a vehicle of average fuel efficiency and drove it 10,000 miles a year, a typical amount. This driving alone would create more than 44 billion tons of carbon dioxide annually. But leading scientists say we must reduce annual carbon dioxide emissions to around 7 billion tons annually to protect ourselves against climate change.

How can we get there from here? Today, politicians can point to specific efforts such as questionable subsidies or a “green jobs” program and claim they are taking action. And though most economists and environmentalists agree on the incentives—such as carbon taxes—needed to truly green the economy, politicians, especially those hailing from carbon-intensive areas, are slow to embrace them, as are voters increasingly concerned with pocketbook issues.

With the right policies, we can build a green economy and stabilize the climate. A good first step might be to stop telling ourselves that half measures will work and that the transition will be easy and painless: just a few subsidies here, some technological wizardry there, and presto, green jobs. This may be the most inconvenient truth of all. ••

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