

# How the United States Can Improve Energy and Climate Policies

By Daniel C. Esty & Steve Charnovitz



**Energy policy needs to be part of a multi-prong, market-oriented competitiveness strategy. Proper price signals could internalize the costs of greenhouse gas emissions, drive innovation, and create the foundation for an expanded clean energy marketplace.**

Although the recent G8 Camp David Declaration highlights the importance of better policies on energy and climate change, the fact remains that the United States and other major economies continue to miss opportunities to reshape those policies in ways that would promote national competitiveness while simultaneously enhancing environmental sustainability. The biggest shortcoming in U.S. policy is the continued inability to signal to other governments and the private sector that, in the future, carbon energy will have to pay for its environmental and social costs. The drift and uncertainty in federal law robs U.S. companies of the clear policy roadmap that they need to make significant new investments in energy efficient and climate-friendly technologies. We hope that after the 2012 elections, the President and Congress will take steps to establish a long-term energy strategy that provides incentives to drive innovation and enhance economic growth while boosting U.S. competitiveness, advancing needed job creation, and achieving energy security.

A successful energy policy needs to be part of an overall competitiveness strategy. Such a strategy would involve all of the key components of competitiveness including public infrastructure, education, training, critical technology, manufacturing, saving and investment, trade, immigration, and corporate governance.<sup>1</sup> Unfortunately, however, for over a decade, federal policies in these key areas have been, at best, suboptimal, and,

more typically, chaotic or counterproductive. As a result, the U.S. economy vastly underperforms its potential.

To turn this around, the federal government should use the dual lenses of competitiveness and sustainability to plan and to make difficult policy choices. Long-term solutions are to be preferred to short-term fixes. Data should drive policy direction, not the other way around. New programs should be benchmarked against best practices subnationally and globally. All federal subsidies need to be based on market logic rather than political expediency. And new major federal regulations should get careful screening to assure that the expected benefits exceed the expected costs.

At the same time, the United States should embrace its status as a leader in the world community and in the fragile institutions of the global economy. Yet too often in recent years, the United States—hampered by a deep political divide and resulting policy breakdowns—has failed to play its traditional leadership role, most notably in international climate negotiations and in the Doha Round of the World Trade Organization (WTO). Although a leadership posture and leading by example entails some costs, we strongly believe that the lack of U.S. leadership threatens to undercut the benefits of economic globalization by leaving it poorly managed.

With this overall framework, this article proposes four ways in which the United States can use energy policy to promote greater innovation and efficiency in the private sector. To be sure, numerous federal programs ostensibly already seek this result. But we would argue that many of these efforts have been poorly targeted and have often underperformed because the core market failure in energy policy—the absence of cost internalization of carbon emission costs—has gone uncorrected for political reasons.

First, the economy needs better price signals to give companies a clear incentive to change their behavior and to invest in new technologies that avoid environmental harm. For over a decade, political opposition to a cap-and-trade system has derailed efforts to limit greenhouse gas emissions in the U.S. This stalemate demonstrates the need for new thinking. In our view, a gradually increasing carbon charge offers a simple, more direct, and highly effective approach to pollution in general and climate change in particular.

We propose that Congress levy such a charge at the first point of sale (or export) of a fossil fuel. In other words, coal, oil, and gas companies should pay on the basis of the carbon content of the fuel they deliver. Such a charge would partially internalize environmental costs, drive investment in energy efficiency, and encourage innovation in renewable electric power

A  
be  
fra

(from  
solar,  
More  
and ir  
Spe  
emiss:  
(perh  
per to  
would  
investi  
charge  
would  
year, a  
help r  
many  
vidual

We  
costs fr  
over tin  
costs at  
tiveness  
avoid e  
that the  
willing  
such as  
cies. We  
tion afte  
a plan f  
rounds

Seco  
crease i  
United  
energy l  
China, l  
China in  
double U  
quadrup.

At the  
inate the  
the cause  
debacle a  
panies. B  
oppose. R  
ernment c  
ist. The in  
technolog  
market di  
record wh

**A carbon charge would increase energy costs for some companies in the short term, but the benefits over time to the American economy would outweigh those costs and provide a policy framework that promotes competitiveness and sustainability, and thus long-term prosperity.**

(from sources including advanced biofuels, hydropower, wind, solar, and geothermal), and in carbon capture and storage. More immediately, it would induce companies to reduce waste and inefficiency, and create products that do the same.

Specifically, we suggest a charge of \$5 per ton of carbon emissions, beginning after the U.S. economy has recovered (perhaps in 2013) and rising \$5 a year to a maximum of \$100 per ton. A slow but steady escalation from a very low base would minimize the initial economic burden while changing investment behavior immediately. The logic for a U.S. carbon charge goes beyond emissions control. Even a modest charge would raise substantial revenues—about \$28 billion in the first year, and about \$250 billion a year after a decade—and could help reduce the bloated U.S. national debt while avoiding many of the negative consequences of raising taxes on individual or corporate income.<sup>2</sup>

We recognize that a carbon charge would increase energy costs for some companies in the short term, but the benefits over time to the American economy would outweigh those costs and provide a policy framework that promotes competitiveness and sustainability, and thus long-term prosperity. To avoid even short-term impacts on competitiveness, we propose that the start date for the carbon charge be predicated on a willingness of other major economies who have not yet acted, such as China and India, to enact broadly comparable policies. We believe that if the U.S. passes carbon charge legislation after the election, other countries will follow suit, making a plan for reduced global emissions a realistic goal in future rounds of climate change negotiations.

Second, the federal government should substantially increase its funding for basic research on clean energy. The United States spends a far smaller fraction of its GDP on energy R&D than major marketplace competitors, such as China, France, Japan, and Korea. Indeed, the advances in China in recent years have been startling. Rather than merely double U.S. research funds, we propose that the United States quadruple such funding over the next few years.

At the same time, the federal government should work to eliminate the technology-specific corporate subsidies that have hurt the cause of clean energy. Here we are referring to the Solyndra debacle and other failed investments in solar and battery companies. But it is not just poor investments in hindsight that we oppose. Rather, we object to the entire idea that the federal government can be or should try to be a competent venture capitalist. The intrinsic problem with subsidies specific to companies or technologies is that they are subject to political influence and lack market discipline.<sup>3</sup> Bureaucrats inescapably have a poor track record when it comes to picking technology winners.

Although subsidies can be an appropriate instrument for alleviating market failure, the U.S. government often grants them for political rather than economic reasons, with consequently poor results. The tens of billions of dollars that have been spent to support corn-based ethanol—which drove up food costs without producing much energy gain—was the most visible and dramatic example. But many other unwise energy subsidies are in place as well. Thankfully, many of the U.S. policies to support the domestic ethanol industry expired at the end of 2011.

Third, a more innovative, clean energy sector in the United States will not only promote sustainability, but it can also promote greater U.S. competitiveness and job creation through exports. A recent study by the Office of Senator Ron Wyden found that over the past four years, U.S. exports of environmental goods grew 19 percent while world exports of such goods grew 38 percent.<sup>4</sup> We think that both of these percentages are lower than they should be. A bigger clean energy market can expand scale and thereby lower costs.

One way to boost exports of clean energy technology is through trade liberalization and trade agreements. Although the WTO Doha Round has a specific objective of liberalizing trade in environmental goods and services, the progress made in those negotiations has been sidetracked because of the impasse in the overall Round. We have long urged that the environmental chapter of the Round be advanced separately in the WTO. Recently, we learned of an even more ambitious proposal by Dartmouth Professor Matthew Slaughter<sup>5</sup> arguing that the United States and other like-minded countries should negotiate a Clean Technology Agreement (CTA) modeled on the WTO's highly successful Information Technology Agreement (ITA) of 1996.<sup>6</sup> As with the ITA, the CTA would eliminate all international trade barriers, but Slaughter also proposes that the CTA eliminate investment barriers too. He suggests that such a new Agreement could be negotiated in the WTO, as was the ITA. But he also points out that it could be negotiated elsewhere, such as the upcoming U.N. Climate Change conference in Doha, Qatar.

We welcome Professor Slaughter's suggestion and can see considerable benefit in putting clean tech trade and investment on the U.N. agenda. The WTO has no formal monopoly on multilateral trade negotiations, and there is certainly no legal reason for why a CTA could not be taken up by the climate regime. On the contrary, international institutions are likely to perform more effectively when they compete with each other. Indeed, merely taking up the clean tech trade issue at Doha (with that location's symbolism for the WTO) could push trade ministers into restarting the moribund talks in the WTO.



# The World Financial Review

July - August 2012

worldfinancialreview.com

**Managing Business  
Risks from HR  
Sourcing**

Is Venture Capital  
In Crisis?

Sino-Russian  
Relations Reviewed

Big Data & Making  
Smarter Decisions

Google vs. the Law  
Online Privacy



**BR** empowering your communications globally

ISSN: 1756-3763  
9 771756 376305 07  
USA \$22 EU €17.5  
CAN \$22 UK £15