

GLOBAL MIDWEST POLICY BRIEF

Ideas to ensure the Midwest's success in a global era

Climate and Energy – The Midwestern Stake

by Stephen Brick

Big things are happening on climate and energy policy in Washington, D.C., and the Midwest has an especially large stake in the outcome. Benjamin Franklin's aphorism that "we must all hang together, or assuredly we shall all hang separately" speaks to the moment. If we find ways to cooperate as a region, our chances for success increase. If we act as isolated states and cities, we are more likely to fail.

On June 29, 2009, the House passed—by the barest of margins—HR 2454, the American Clean Energy and Security Act. The Waxman-Markey bill, as it is more commonly known, is prodigious in scope and unprecedented in ambition. The effort to put a man on the moon was a walk in the park compared to what this bill seeks to accomplish.

If enacted—and the bill's fate in the Senate is anything but certain—this measure would usher in a multidecade project to transform the U.S. economy. This transformation would mark the end of a period that began with the Industrial Revolution and culminated in the vast, post-World War II economic expansion—a quarter of a millennium's economic growth—all powered by inexpensive, abundant fossil fuels. If the vision of Congressmen Henry Waxman (D-California) and Edward Markey (D-Massachusetts) is realized, the country will look very different in 2050 than it does today.

For the first time Congress has devised an integrated approach that links energy use and environmental protection. For a century, since the hydropower controversies of the early 1900s, our energy policies have taken precedence over environmental concerns. More often than not, we worried first about creating energy and only later took action to clean up the environmental consequences, usually after the damage was done.

With Waxman-Markey we have a strategy aimed at heading off the worst effects of climate change based on a complex web of energy policies. This law would leave no element of society untouched. Its many provisions would launch an effort of staggering magnitude and complexity. If you believe that the future of the planet is at stake, there is no alternative. If you have doubts, either about the problems the bill seeks to redress or the economic and social impacts of the cure, then this is a moment for measured consideration.

The Midwest has a major stake in this debate. Prospects for real national policy change depend heavily on Midwestern support, and the Midwestern economy, with its base in manufacturing and farming and its large output of U.S. carbon emissions, will be disproportionately affected. Together, Midwestern states pay \$100 billion per year for imported energy. In addition, six big manufacturing states—Illinois,

Indiana, Ohio, Michigan, Wisconsin, and Iowa — produce nearly 5 percent of the world’s total greenhouse gas emissions. The twelve Midwestern and Great Plains states produce 80 percent of the nation’s ethanol and much of its coal. The Midwest, in short, is ground zero in the national climate and energy struggle.

What Waxman-Markey Does

Waxman-Markey is 1,427 pages long. Its basic goal is to reduce U.S. greenhouse gas (GHG) emissions 82 percent below 2005 levels by 2050. This is in line with the recommendations of the Intergovernmental Panel on Climate Change (IPCC), the UN-chartered scientific body that studies and prescribes remedies for human-induced climate change. Reductions on this order are needed, according to the IPCC, to avoid real damage to the global climate system.

Waxman-Markey combines an extensive menu of energy policy initiatives with a national cap on carbon emissions. The cap would go into effect in 2012 and gradually tighten through 2050. The number of affected entities increases over time so that by the end of the next decade, 85 percent of the economy would be included.

In the early years of the program, affected sectors—electricity generation and petroleum refining, for example—would receive a certain number of emission allowances, or the right to emit a specific amount of carbon, free from the government. Each year, polluters would be required to surrender their allowances to the government to cover their emissions. If their emissions exceed their allowances, polluters would have to make up the difference either through technology changes or through purchasing additional allowances from companies with lower emissions.

Over time, as the carbon cap decreases, the number of allowances issued by the government would likewise decrease. By 2030 most free allocation would cease and polluters would bid on allowances through a government-sponsored auction. Low-carbon energy alternatives would have an increasing

cost advantage as the cap tightens. In essence, this “cap and trade” program puts a price on carbon that would drive the transformation of the nation’s energy system.

Here are some calculations that help put the proposal into perspective:

- U.S. greenhouse gas emissions would drop from present levels of around 24 tons per capita to three tons per capita.
- Carbon emissions per dollar of GDP would decrease eighteenfold.
- The cost to a typical U.S. family would begin at around \$60 per year in 2012, but grow to over \$2,500 per year by 2050. This includes both the direct impact of higher energy costs as well as indirect costs as the increased costs of goods and services are passed on to consumers.

These numbers don’t mean much by themselves. The cost figures, in particular, have been used to argue against action. But considering costs in isolation from the benefits of the program is only half the story. The real considerations are, first, what do we get for our money? And second, does it buy a better world—a cleaner and safer place to live?

It could turn out—indeed, Congress is depending on this—that the benefits will outweigh the costs and that in the end we’ll be ahead. This hope rests on the assumption that in the course of a total energy makeover we will create new jobs and stimulate economic growth. As we become less reliant on imported and increasingly scarce petroleum, the country will be more secure. The economy will be better insulated from the shocks of price run-ups and supply disruptions. And, reducing fossil fuel use will cut back an array of pollutants responsible for higher health care costs and environmental degradation.

Midwestern Initiatives

The debate that preceded the passage of Waxman-Markey actually began in the states and cities. The Chicago Council on Global Affairs’ Task Force on

National Energy Policy and Midwestern Regional Competitiveness issued its findings in May in its report *Embracing the Future: The Midwest and a New National Energy Policy*. The report made twenty-seven recommendations for federal action under three broad themes:

- Efficiency is the first plank in the energy policy platform.
- The government must smooth the way for commercialization of a range of low-carbon supply technologies.
- The Midwest's agriculture and forestry sectors can help lower the cost of climate mitigation by offsetting carbon emissions in soils and trees.

Over the past couple of years, Illinois, Iowa, Michigan, Minnesota, Ohio, and Wisconsin have called together task forces on energy and climate. The Midwestern Governors Association adopted a set of far-reaching energy and climate accords in November 2007 and will reconvene in Detroit this October to consider further policies recommended by regional stakeholder advisory groups. The cities of the Midwest have also been engaged in the energy and climate dialogue, with comprehensive plans coming from places as large as Chicago and as small as River Falls, Wisconsin. Although each plan has a unique flavor, energy efficiency, low-carbon supply, and offsets are common themes.

Waxman-Markey does a good job in each of these areas and proposes an especially rich menu of policies to promote efficiency. It remains to be seen how the Senate treats the proposal, and the effectiveness of many provisions will depend on subsequent rulemaking and agency actions. But for the moment, we should declare victory and consider what this means for the Midwest.

What Must the Midwest Do?

Most critically, we need a regional framework for cooperation. Much of the work of transforming our energy infrastructure will look the same from city to city and state to state. By sharing best practices we

can learn more quickly, adapt more nimbly, and produce better results from limited resources.

Nothing is more urgent than developing a smart network for capturing energy efficiency. So far, only Minnesota and Wisconsin have any sort of continuous record of state or utility-sponsored energy efficiency programs. Elsewhere in the region, capacity to design and deliver efficiency services is atrophied or nonexistent.

But now, planning has begun and the federal stimulus package has promised an influx of new resources. This has roused cities and states to action, but they are playing a frantic game of catch-up. Already, we're seeing that we lack the capacity to do basic work such as energy auditing and home weatherization. We simply don't have the trained bodies to do the job.

The challenges we face will look much the same, whether in Fargo or Columbus, and creating programs from scratch for each state or city is both unnecessary and wasteful. Two things are especially crucial as we embark on a new generation of efficiency programs.

First, we must dramatically increase the number of customers involved in programs. Home weatherization programs, rebates for efficient appliances, and incentives for efficient new construction are all promising. But if we only reach 10 percent of customers, we will miss the aggressive savings foreseen by state and federal policymakers.

Second, we must maximize per-customer savings. In the past, efficiency programs have left too much on the table, taking advantage of only the most cost-effective measures, while letting other opportunities go to waste. Going forward there will be no second chance for many market segments—especially residential and commercial customers..

If we are to beat the climate clock, we must capitalize on every opportunity to improve efficiency. We must also explore new tools for increasing participation and per-customer savings. Geographically

concentrated marketing, social networks, and the burgeoning field of behavioral economics have lessons to offer as we seek to capture the region's efficiency potential.

A New Role for Soil and Trees

Collaboration is equally critical if we are to take advantage of the carbon-storing capacity of the region's soils and forests. In addition to providing low-cost emission reductions, offsets can provide an economic boost to these important sectors of the Midwest economy.

Offsets need to be, in climate lingo, "real," "surplus," "verifiable," and "permanent." We don't want to encourage behavior that undermines the effort to mitigate climate change. On the other hand, we don't want to create systems that artificially suppress legitimate use of offsets.

We should begin to consider soil offsets within a broader context of agricultural subsidies and landscape-based conservation goals. This wider perspective will lead to a framework in which carbon offsets are one benefit in a larger, integrated package. Landscape conservation practices can protect biodiversity, reduce water pollution, and store carbon in ways that are consistent with effective climate mitigation.

At the moment, these benefits tend to be considered in isolation. This means they often are insufficient to change entrenched behavior. But if landowners are offered a payment that captures the combined value of habitat preservation, water pollution reduction, and carbon sequestration, the incentive will be much stronger.

The offsets puzzle is more or less the same whether we think about the agricultural landscape of southern Illinois or the forests of northern Minnesota. If we try to muddle individually through this complex, we'll miss the chance to develop a robust solution that benefits the entire region.

Finally, we have an opportunity to stake out a Midwest role in the global effort to develop advanced coal technologies. This can pave the way for a larger role on the international economic stage. In the Midwest, coal is a special issue. The Midwest has a compelling interest in developing technologies that generate electricity from coal, while capturing and disposing of their carbon emissions. We are more coal-dependent than any other region of the country. It is hard to imagine a future that does not entail some continuing use of coal, even with dramatic increases in energy efficiency and the use of renewable resources.

Planning and building the infrastructure for transporting and disposing of captured carbon emissions is, at the least, a regional task. The economic and technical risks of demonstration projects can be shared by the region, as can the benefits.

The role of Midwestern politicians is complicated. The Midwest has a vested interest in a positive climate and energy policy. But any action has costs as well as benefits. Already, ten Democratic senators from important coal and manufacturing states have told President Obama that they can't support any climate change bill that doesn't protect U.S. industries from competition from countries that don't impose similar changes. Six of the ten senators represent Midwestern states.

Midwestern governors are not going to stop competing with one another for new business. We will also not shed basic Midwest values of self-reliance. But we now have an opportunity to work together in ways that will serve every state in the region and every sector of the economy. This collaboration can create a solid foundation on which healthy competition—and, indeed, the future of the region—can be based.

About the Author

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