American Clean Energy and Security Act of 2009:
A Potential Boost for Midwestern Manufacturers
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There is unusual unanimity in the scientific community that global warming is accelerating dangerously, that it is due to human activity, and that there is a narrow window for mitigation before rising temperatures and rising waters cause international strife and suffering. There is less unanimity in the political and business communities, where doubt about the science and fears for the economy dominate discussion. Ohio, a state where a high percentage of energy is generated by older, fossil-fuel utility plants, has been one of a handful of Midwestern states watching climate legislation with concern.

Ohio’s concerns have shaped key reinvestment provisions of the American Clean Energy and Security Act of 2009 (ACES). Ohio legislators introduced significant provisions to prepare domestic producers to seize the new market opportunities offered by a transition to a clean energy economy. Additional business investments, including price mitigation, funding for clean energy vehicles and for carbon capture and sequestration, will total about 60 percent of the value of the proposed cap and trade program. It has been generations since American firms have seen the level of reinvestment proposed in the American Clean Energy and Security Act of 2009.

Carrots and Sticks

At the heart of the ACES legislation are carrots and sticks. Carrots come from demand for clean energy, which will be driven by renewable energy and energy efficiency standards of the legislation. These standards require utility companies to provide increasing shares of their energy from renewable sources or to reduce energy needs through efficiency measures installed within their own facilities or at the factories and homes of their customers. Demand for component parts necessary for renewable energy generation (like solar panels or windmill turbines, geothermal pumps or biomass distilleries), as well as for energy efficiency controls and new HVAC systems for industrial plants, will bring new orders to old factories. In addition, under the ACES legislation revenues are provided for energy efficiency in buildings and homes, which will buy insulation and doors and windows, siding and HVAC systems and energy efficient appliances. The ACES legislation also requires increasing energy efficiency in automobiles with corresponding reduction in emissions, which will drive demand for parts for hybrid and other energy efficient cars.

The ‘stick’ is the market price that will be assigned to emissions of greenhouse gases through the cap and trade mechanism. The amount of greenhouse gases that can be emitted into the sky will be capped, and utilities and some companies will have to pay for ‘emissions allowances.’ The price of the allowances, set by the market, will be a new factor in the cost of domestic production. Companies will want to reduce emissions reduce costs.
Carrots: Fast Growing Clean Energy Opportunities

Even without mandates, clean energy production has been one of the nation’s fastest growing sectors. In Ohio, according to the Pew Charitable Trust, clean energy sectors grew at seven percent over the past decade while all employment fell by two percent.¹ The presence of cap and trade systems in Europe, in the northeast states of the United States (Regional Greenhouse Gas Initiative, or RGGI), through the Chicago Climate Exchange, and under development among the Western States Consortium, is already driving domestic demand. A national mandate across the vast American market presents an unparalleled business opportunity. The danger, of course, is that the production will happen abroad instead of in America.

Legislation introduced into the Senate by Ohio Senator Sherrod Brown and carried into the ACES legislation by Ohio Representatives John Boccieri and Zach Space will help anchor production in America. Aimed at small- and medium-sized firms with less than 500 in employment, the ‘Investments for Manufacturing Progress and Clean Technology’ (IMPACT) legislation would provide $30 billion dollars over 2010 and 2011 to allow domestic companies to prepare for the transition to a clean energy economy. Ohio could be one of the largest recipients of IMPACT funds with up to a billion dollars for economic development purposes over the two years of the proposed loan program.

Sticks: Cushioning the Blow

The second key provision of the ACES bill is a system of cap and trade that limits the amount of pollution that can be emitted into the air (the cap) and assigns a price to polluting through an auction of ‘allowances’ (the trade). This is the ‘stick.’ However, the ACES bill contains provisions to soften the blow. According to the Wall Street Journal, 60 percent of the value of the allowances is targeted to investment or price mitigation for industry.²

- Initially, 15 percent of allowances will be provided free to energy-intensive, trade impacted industries (for example, iron and steel, paper, glass, chemicals, cement) to prevent a loss of jobs and downstream price shock to the customers.
- During the transitional early years of the program, 43.75 percent of emissions allowances will be provided to utilities to mitigate price impact to customers. This value is spread across residential, commercial and industrial customers in accordance to their share of customer base: industrial users comprise thirty-seven percent of utility customer base.

Through these two mechanisms alone almost a third of the value of the carbon cap and trade program is directed toward mitigating the cost impact on industry during the transition to a clean energy economy. This is in addition to the funds to be provided through the IMPACT legislation. Taken together, climate legislation comprises a huge program of support and reinvestment aid directed toward the nation’s industrial base, of which Ohio hosts the third largest industrial region.

There are other elements of the ACES bill designed to make the American manufacturing base more competitive. For example, the legislation would invest $190 billion in new clean energy technologies

¹ Pew Charitable Trust, The Clean Energy Economy, June 2009
and energy efficiency, including energy efficiency and renewable energy ($90 billion in new investments by 2025), carbon capture and sequestration ($60 billion), electric and other advanced technology vehicles ($20 billion), and basic scientific research and development ($20 billion). Other competitiveness programs include:

- **Coal**: The ACES legislation establishes a national strategy to support Carbon Capture and Sequestration (CSS). It requires the development of standards for geologic sequestration, establishes a CCS demonstration and early deployment program and authorizes fossil-based electricity distribution utilities to hold a referendum on the establishment of a Carbon Storage Research Corporation. It establishes a program to award grants, contracts, and financial assistance to eligible entities to accelerate commercial availability and CO2 capture and storage technologies. It provides the value of 1.75 percent of auction proceeds through 2017 and 5 percent thereafter in Carbon Capture and Sequestration.

- **Automotive**: ACES establishes the Vehicle Manufacturing Assistance Program. It provides financial assistance to auto manufacturers to be used for retooling and purchasing domestic vehicle batteries. Preference for financial assistance is given to manufacturers who are located in local markets that have the greatest need for the facility. It provides for distribution of emission allowances to manufacturers to help them retool and deploy advanced technology vehicles. It increases the EISA Advanced Technology Vehicle Manufacturing Incentive Loan authorization to $50 billion. These activities are supported through auction proceeds of 3 percent through 2017 and 1 percent thereafter.

- **Economic development**: ACES utilizes 1 percent of emission allowances to create eight “Energy Innovation Hubs” comprised of non-profit research, university and venture capital consortia, to encourage and finance innovative research toward commercialization. It provides $20 million to create a Clean Technology Business Competition Grant Program to provide green business start-up grants and incentives, training, and mentorship to entrepreneurs. It lays out a plan to promote innovation and leverage private resources to export US clean energy technologies, including CCS, renewable energy, electric transmission upgrades, and zero-emissions technologies. Thanks to Ohio Representative Marcy Kaptur, it establishes a new federal lending authority in the Midwest to support renewable energy development in the region.

- **Energy efficiency**: ACES provides for investments in renewable energy and energy efficiency through SEED accounts at the States: 9.5 percent of auction proceeds through 2015, decreasing to 1 percent in 2025, increasing to 4.5 percent through 2050. It funds the ‘Building Retrofit Program’ to upgrade public housing and other facilities with .05 percent of emissions allowances through 2017, 0.03 percent thereafter.

- **International trade**: Companies who sell into international markets will be eligible for export rebates if the cost of carbon boosts the cost of domestic production over international market prices. By the time the cap and trade program is fully phased in, border adjustments will be placed on products of countries that do not regulate their own pollution unless Congress provides authorization to the President to withhold such adjustments.
Summary

There is much in the American Clean Energy and Security Act of 2009 that can stimulate domestic production or mitigate price shock to industry. In fact, the ACES bill provides so much for business and industry that it is accused by some of being too weak. However, given the crucial role that energy and manufacturing play in our economy, assisting in transitioning is warranted and should make the carbon cap and our economy both more effective in the long run.

The relative cost of powering our economy is complex. The cost of doing nothing is arguably greater than the cost of the American Clean Energy and Security Act of 2009. Our heavily subsidized fossil fuel markets are no longer dependable. Spikes in the cost of oil hamstring business planning. Existing fossil fuel infrastructure is aging. Do we replace it with more of the same – with its ominous shadow of international strife – or figure out how to use American ingenuity to create a new and diverse system that is reliable, clean and dependable? Gulf War veteran John Boccieri of Ohio’s 16th District puts it this way: “The highest carbon tax ever paid is the cost of the Iraq war.”

Congress has been working on climate change legislation for the past four years. Over 40 days of hearings with 300 witnesses have been held on the Hill on climate change legislation in the past two congresses. This is legislation that has been a long time coming. Midwestern legislators have been formulating positions that work for their constituents. The American Clean Energy and Security Act of 2009 presents many opportunities the Midwest should not refuse.