# Output-based rebates, border adjustments and domestic content: Provisions to ensure advanced energy jobs grow at home

A Brief From

Policy Matters Ohio

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# Issue Brief on Climate Legislation

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# Provisions to ensure advanced energy jobs grow at home

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## Executive Summary

Controlling carbon emissions will create new markets for energy efficiency and clean energy, and Ohio could be a big beneficiary. Ohio's potential to capture new energy markets is demonstrated in rising business activity and job growth in those sectors. But progress is hampered by lack of clear national policy, which makes investment in new energy markets risky. Manufacturers, banks and investors in Europe, where strong national policies assure a long-term commitment to advanced energy, enjoy less risk. Without a clear policy direction to underpin a unified domestic market, American firms – Ohio firms – face much higher barriers to entry in competitive advanced energy markets than their international counterparts.

National policy is needed to reduce risk beyond entry: it is needed to secure opportunity in competitive global markets. If a polluting plant moves offshore and takes its jobs and pollution with it, we have lost. However, there are solid, workable proposals on the table to manage this risk. In this issue brief, we explain three policy proposals that can secure domestic jobs without damaging international relationships: output based rebates, border adjustments and domestic content and investment provisions. We conclude that concerns associated with these policies are overstated, particularly with regard to domestic content, where technical solutions like a unified web page and improved waiver protocol could provide an inexpensive means to support domestic manufacturing in growing advanced energy markets.

## Border adjustments

There is just one global limit for carbon in the atmosphere. To control global warming, all nations must work together to limit pollution. After all, it is the limiting of carbon emissions that creates the new markets for advanced energy. Until the nations of the world come together on a strategy to reduce carbon emissions, however, there is the danger of capital flight to places with lax regulation.

One way to ensure that polluting plants do not flee to countries with lax regulation, taking jobs with them and undercutting responsible employers, is through the use of border adjustments. A border adjustment is a tariff, a fee imposed on the products of a foreign nation to prevent unfair erosion of the domestic economy due to deliberate or predatory policy by a foreign government. It is a policy tool that can allow trade between countries with different environmental rules, without penalizing the nations that are trying to set higher standards.

In the American Clean Energy and Security Act of 2009 (ACES), border adjustments are phased in five years after the carbon cap is implemented and imposed against countries that have chosen not to regulate carbon emissions. This increases the price of their products in the American market, preventing them from undercutting domestic manufacturers. Nobel Prize-winning economist Paul Krugman describes it in this way: "If you only impose restrictions on greenhouse gas emissions from domestic sources, you give consumers no incentive to avoid purchasing products that cause emissions in other countries; as a result, you have an inefficient outcome even from a world point of view. So border adjustments here are entirely legitimate in terms of basic economics."[1]

Border adjustments cut off the low road of production. If firms can produce in low-cost countries with lax environmental laws and come up with a cheaper product, then they can undercut domestic manufacturers by selling here at a lower cost. A border adjustment does not deny access to the vast American market, but it prevents an undercutting of American manufacturers. It strengthens the competitive advantage associated with responsible American employers and American workers.

A commonly cited concern is that the World Trade Organization (WTO) will not allow carbon related border adjustments. Krugman argues that this is unlikely. He equates the border adjustments proposed in the ACES bill with border adjustments for value-added taxes (VAT), a common practice among the many nations that levy such taxes. A VAT is essentially a sales tax (a tax on consumers), which for administrative reasons is collected from producers. Because it is essentially a tax on consumers, it is legal under GATT to collect it (impose it) on imported as well as domestic goods; it's a matter of leveling the playing field, not protecting domestic markets.

Equalizing the cost of pollution control on domestic and international producers is similar to equalizing the impact of the value added tax. The WTO itself made a similar point in a June 2009 publication produced jointly with the United National Programme on the Environment: "Rules permit, under certain conditions, the use of border tax adjustments on imported and exported products. The objective of a border tax adjustment is to level the playing field between taxed domestic industries and untaxed foreign competition by ensuring that internal taxes on products are trade neutral."[2]

**Output-Based Rebates**

Under national climate legislation, there will be a period of transition during which firms upgrade facilities and processes to eliminate waste and cut costs associated with carbon pollution control. During that period, rebates are proposed for carbon-intensive firms to prevent a loss of competitiveness in the world market. Known as an 'output-based rebate' (and included in the ACES legislation), these rebates can keep energy- intensive domestic manufacturers competitive globally by compensating eligible facilities with a payment that is directly proportional to the cost of carbon permits acquired.

The following example of how output-based rebates work is taken from the website of Dr. Holmes Hummel, a leading voice in climate policy design. Dr. Hummel explains: "Facilities eligible for an output-based rebate have to accept a certain price in the global economy. For instance, the price of hot rolled band steel is a widely followed benchmark established through an international

[1] Paul Krugman's blog, cited in the Financial Times, June 26, 2009
[2] Financial Times, Op.Cit.

market. Like other commodities, U.S. manufacturers sell hot rolled band steel at that price no matter what their actual costs are. As a result, there is a risk that pricing carbon emissions in the U.S. would not change the price of steel, but rather would change where it is produced. A rebate to compensate domestic firms in a market where carbon is not uniformly priced would protect American firms from unfair competition."[3]

Concerns related to the WTO are raised with regard to output-based rebates as well as to border adjustments. There is concern that a direct payment (or a tax credit, or a financial incentive) may be a "subsidy" under the WTO's Agreement on Subsidies and Countervailing Measures. However, a subsidy is only subject to challenge in the case that a challenging industry can prove loss of sales. A rebate for added costs incurred under a domestic environmental policy would be unlikely to have any demonstrable impact on international competitors.

Further, it is expected that an argument could be made for justifying rebates and border adjustments on imports under Article Twenty, the general exceptions clause. Three exceptions in that clause may be relevant for building that case: [4]

- Necessary to protect human, animal or plant life or health…
- Necessary to secure compliance with laws or regulations, which are not inconsistent with the provisions of this Agreement…
- Relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption."

The last cited exception is particularly relevant for energy products and for the climate.

**Domestic content and investment**

A recent debate over federal stimulus funds that went to a Texas wind farm whose equipment was produced in China illustrates the problem of manufacturing new products in the United States.[5] The global playing field in manufacturing is uneven. For example, Ohio lost 91,800 jobs to China between 2001, when China entered the World Trade Organization, and 2008, the latest year for which data is available. Currency manipulation, subsidies and border protections make production there cheaper than in western nations, quite apart from the dramatic wage disparity.[6] Erosion of America's industrial base in the face of unfair trade competition has made it difficult to source domestically. This makes policies that require a 'made in America' stamp on subsidized equipment difficult. However, as new capacity to serve advanced energy markets develops, it is essential that manufacturing capacity be re-created here to serve domestic needs. This is a matter of national security as well as job creation.

Therefore, any renewable energy projects or advanced energy manufacturing operations *supported by federal funding* should have strong domestic content ("Buy America" or "Buy American") requirements and incentives attached to them. Clearly, the majority of the market in advanced energy production will not be subsidized. It will occur in the private sector; no domestic content provisions will apply. The federally subsidized production, however, needs to be sourced

[3] This section relies on the explanation provided by Dr. Holmes Hummel at http://www.holmeshummel.net/ClimatePolicyDesign/OutputBasedRebates.pdf
[4] Holmes Hummel at http://www.holmeshummel.net/ClimatePolicyDesign/OutputBasedRebates.pdf
[5] Plain Dealer, "Giving in to senators' protectionist impulse on clean-energy projects would be a job-killer: editorial," http://www.cleveland.com/opinion/index.ssf/2010/03/giving_in_to_senators_protecti.html
[6] Policy Matters Ohio, Jobs and the Trade Deficit: A growing Problem, March 2010

domestically if possible to support the rebuilding of American's manufacturing base. A percentage requirement as low as 60% (if possible) would go a long way toward strengthening America's industrial base.

Getting from here to there is not as daunting as it is made out to be. The problem with existing domestic content standards is that they are complex and dispersed in federal law. To be effective, they need to be simplified, rationalized and clarified around principles of transparency and accountability in the prioritization of American production. Specific recommendations include:

**Transparency**

1. A good domestic content requirement should prioritize funding for manufacturers that document the greatest use of domestically-sourced parts and components. Carrots can be used to encourage domestic sourcing. For example, economic development loan and grant funds could be restricted to manufacturers that use at least 60 percent American-made component parts in their products with final assembly in the United States.

2. The process for issuing waivers for domestic content requirements should be made more transparent and accountable. Create a website centralizing information about domestic content requirements in a single publicly accessible place, where rules and definitions can easily be accessed and waiver requests can be made public.

3. Post all waiver requests and justification for waiver grants on the website for at least one month, to allow domestic manufacturers to contest claims that products or materials are insufficiently available or of too high a cost.

4. Evaluate impact and post evaluation on the web site. This can be accomplished through regular performance reporting on the programs' effect by The Office of Management and Budget. To aid in this reporting, all waiver requests should be submitted with an employment impact statement, detailing the effects on U.S. manufacturing jobs.

**Accountability**

1. Issue standard accounting practices for measuring the domestic content.

2. Create a single set of rules and standards for domestic content requirements.

3. Require independent audits, overseen by the relevant federal agency.

4. Establish and enforce penalties for those who fail to comply.

**Ensure support for U.S. manufacturers by requiring proper consideration of all domestic suppliers.**

1. Consider domestic alternatives, including all reasonable substitutes.

2. <u>No floor for size</u>: Safeguards should be enacted to prevent projects from being split into segments small enough to be exempted from domestic content requirements.

3. <u>Encourage higher achievement in domestic content</u>: Provide incentives to support capital purchases with higher-than-required domestic content.

By increasing transparency, strengthening accountability and closing loopholes; by strengthening the audit process to ensure that real American suppliers are doing the work rather than foreign partners or plants; and by favoring domestic content in the budget process and in competitive bids, the American manufacturing base and American jobs can be strengthened and protected.

In addition to domestic content provisions for federal procurement, provisions for domestic investment in the private sector could go a long way to creating incentives for production in the United States. Countries that are serious about advanced energy production provide significant capital and other programs to encourage domestic research, development and production. The United States can also rebuild our domestic manufacturing base by funding programs to foster production of advanced energy component parts in U.S. factories, thereby adding to the nation's capital stock, job base and long term economy.

To prevent recurrence of a situation like what happened with the Texas renewable energy facility project, where federal stimulus funds for a wind farm were allegedly targeted for purchase of equipment from China CKCK, programs must be structured to encourage domestic manufacture of the generation capacity, through the Advanced Energy Manufacturing Tax Credit program, for example, described below. For example, one program could have funded feasibility, engineering, land and development work pertaining to the wind farm itself; a second, from a different stream of revenue, could have been packaged for the manufacture of the generation capacity, and a third might have funded workforce training for the operators of the facility. The funds designated to support manufacturing would have been for domestic producers and the training funds supportive of American workers.

Several programs recommended for inclusion in climate legislation would provide for the domestic investment critical to support American production:

- **Renewable Energy Standard (RES) –** A national RES is critical to creating long-term demand and a stable market for renewable energy technologies. Federal climate legislation should include a standard that sets a goal of 20 percent renewable energy by 2020.

- **IMPACT Act provisions –** The 'Investments in Manufacturing Productivity and Advanced Competitive Technology' (IMPACT) Act included in climate legislation passed by the House of Representatives would provide access to capital to help small- and medium-sized manufacturers become more energy efficient, or retool to make clean energy products and components. The IMPACT Act would provide $30 billion to create clean energy manufacturing revolving loan programs, as well as additional support for Manufacturing Extension Partnerships.

- **Advanced Energy Manufacturing Tax Credit –** Climate legislation proposed in the Senate would increase the available funds for the federal stimulus's Advanced Energy Manufacturing (48c) tax credit by $5 billion, but does not provide a source from which to draw these funds. A direct allowance allocation would provide continuous support for investment in domestic clean energy manufacturing capacity.

- **Clean Vehicle Technology Program –** Included in climate legislation on both sides of Congress, this proposed program would support manufacturing retooling and engineering integration for OEMs and component part suppliers for the production of advanced technology vehicles, including hybrid public transit vehicles. At least 3 percent of allowance revenues ($3 billion annually) under climate legislation is needed through 2017.

**Summary and Conclusion**

The competition over access to new energy markets is out of the hands of the states. It is up to the federal government to provide strong leadership to reduce the risk of investment and to secure markets for the long term. We can establish policy that rebuilds our manufacturing base and employs American workers or we could have a situation in which the growing domestic energy markets are served by producers and workers in other nations. Key elements in securing advanced markets for American plants and workers include border adjustments, output-based rebates and domestic content and investment provisions. These trade-related measures, all part of the discussion around energy and climate legislation, would build jobs for American workers in American factories. These are measures commonly used by our trading partners of the G-20. It is time for the United States to be equally strategic and innovative. Europe and China are using all of the tools at their disposal to create jobs in the new energy economy. The United States must do the same.

Policy Matters Ohio is a non-profit, non-partisan research institute dedicated to researching an economy that works for all in Ohio. Policy Matters seeks to broaden debate about economic policy by providing research on issues that matter to Ohio's working people and their families. Areas of inquiry for Policy Matters include work, wages, and benefits; education; economic development; energy policy; and tax policy. Generous funding comes from the Joyce, Gund, Cleveland, Public Welfare, KnowledgeWorks, New World, Annie E. Casey, Sisters of Charity and W.K. Kellogg Foundations, the Economic Policy Institute, and Greater Cleveland Community Shares. To those who want a more fair and prosperous economy... Policy Matters.

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