

Trade Measures and Climate Change Policy: Searching for Common Ground on an Uneven Playing Field¹

JACOB WERKSMAN, JAMES A BRADBURY, AND LUTZ WEISCHER

EXECUTIVE SUMMARY

As the United States and other developed countries have enacted or are in the process of developing legislation to cap greenhouse gas emissions post-2012, their policymakers are under increasing pressure from domestic constituencies to include trade measures as part of climate policy. This Working Paper analyzes relevant measures in emerging U.S. domestic climate policies, describes the objectives of these measures, assesses how they might be imposed, and discusses their implications for both a future climate agreement and the international trading system. It also touches on proposals to use trade measures in the European Union and other developed countries.

We find that:

- **Proposed trade measures are driven by multiple objectives.** Trade measures have been included in draft climate legislation in the U.S. and have been considered by the EU in an effort to achieve several policy objectives: to protect domestic industry from potential competitive disadvantages that might arise from unequal carbon prices (“competitiveness”); to provide temporary assistance to energy intensive, trade exposed industries in transition towards a low-carbon economy (“transition assistance”); to prevent greenhouse gas intensive production from moving to countries with less stringent limits on carbon emissions, undermining the environmental effectiveness of domestic climate policy (“leakage”); and to create incentives for other countries to adopt climate policies and join a future climate agreement (“free-riding”).
- **Protecting domestic industry is not a legitimate use of a trade measure.** The United Nations Framework Convention on Climate Change (UNFCCC) and World Trade Organization (WTO) agreements share a set of common principles that discourage the use of unilateral trade measures that are arbitrary, unjustifiable, or disguised restrictions on trade. Neither the UNFCCC nor the WTO

World Resources Institute Working Papers contain preliminary research, analysis, findings, and recommendations. They are circulated to stimulate timely discussion and critical feedback and to influence ongoing debate on emerging issues. Most working papers are eventually published in another form and their content may be revised.

Suggested Citation: Jacob Werksman, et al. “Trade Measures and Climate Change Policy: Searching for Common Ground on an Uneven Playing Field.” WRI Working Paper. World Resources Institute, Washington DC.

December 2009

authorizes the use of trade measures for the specific purpose of protecting domestic industry from competition.

- **Properly designed trade measures are not prohibited under the WTO or the UNFCCC.** It may be possible to design trade measures that are sufficiently targeted and equitably applied to prevent emissions leakage to contribute to the UNFCCC's objective without violating WTO rules. While the UNFCCC Conference of the Parties (COP) has not formally considered whether using trade measures to prevent emissions leakage or to penalize non-Parties would be consistent with the UNFCCC, some developing country Parties are calling on the COP to prohibit the use of unilateral trade measures (by developed country parties) to promote climate change objectives.
- **Draft U.S. climate policy includes the use of trade measures.** The most procedurally advanced proposal for U.S. climate change legislation, the American Clean Energy and Security Act (ACESA), was passed by the U.S. House of Representatives in June 2009. ACESA is intended, in part, to help "reach an internationally binding agreement in which all major greenhouse gas-emitting countries *contribute equitably* to the reduction of global greenhouse gas emissions."² Yet, ACESA would, in certain circumstances, authorize the U.S. government to use trade measures against products from another Party to a post-2012 international climate agreement, even if that Party was in full compliance with its commitments under that agreement, if the U.S. determines that the Party's commitment in that agreement was not "at least as stringent as" that of the U.S.³ In other words, ACESA would permit the U.S. to make its own determination of whether another country's efforts to reduce its emissions were "equitable" as compared to U.S. efforts. This determination

could override burden sharing as agreed internationally and principles key to UNFCCC, including the principle of common but differentiated responsibilities and respective capabilities of developed and developing countries.

- **A number of developing countries have come forward with significant actions that may entail costs for their domestic industries.** In recent months, a number of developing countries have announced significant new climate policies that would contribute to a global deal and a global response to climate change. As indicated, they have also proposed that the UNFCCC parties agree to prohibit *developed* country parties from using unilateral trade measures to advance climate policy. It is not clear whether these developing countries contemplate the use of such trade measures themselves.
- **The risk of a WTO dispute arising over climate related trade measures is high, but could be lowered or guided by UNFCCC decisions or processes.** If climate-related trade measures were implemented, by either a developed or a developing country, a trade dispute could arise and a WTO dispute settlement panel could be asked to choose between a result that required a country to dismantle a central part of its climate legislation, and a result that allowed the trade measure to stand but that redefined UNFCCC standards for fair and effective climate policy.

Since it is unlikely that the U.S. or the EU would agree to an outright prohibition on the use of trade measures, or that China or India would agree to rules that explicitly authorized such measures, the UNFCCC COP should articulate a set of principles and procedures to limit the use of any trade measures to avoid, or help resolve, any disputes that might arise under the WTO or elsewhere.

TRADE MEASURES AND CLIMATE CHANGE POLICY

Multiple Policy Objectives behind Trade Measures in Domestic Climate Policy

In the U.S. and in Europe, trade measures have been contemplated as part of domestic climate policy in order to achieve multiple policy objectives: addressing competitiveness; providing transition assistance; preventing leakage; and inducing third countries to take ambitious climate action, i.e. penalizing non-Parties for "free-riding."⁴ These multiple policy objectives are in large part a reflection of the diversity of domestic constituencies concerned about the potential impact of legislated caps on emissions. Energy-intensive manufacturing firms, their employees, and the elected officials that represent them are primarily concerned with the impact of emissions caps on their international competitiveness in a context where different countries are moving at different speeds in imposing

carbon costs on industry. Some environmental NGOs worry that capping emissions from industries in developed countries could force these industries, and their emissions, to relocate supply chains and production processes to uncapped countries, thus undermining the effectiveness of domestic emissions limits.⁵

Political interest in unilateral trade measures in the U.S. and the EU is also driven by uncertainty surrounding a future international climate agreement. Both the EU, which has already defined its climate policy through 2020, and the U.S. Administration, which is aiming to pass legislation in early 2010, may begin to ramp up efforts to reduce emissions before a comprehensive post-2012 international climate treaty is in force. Retaining the option of deploying trade measures at some future date is seen as a safeguard against a breakdown in international negotiations or a scenario in which a climate treaty fails to include actions by major developing country economies.

In this spirit, proposed U.S. measures would delay the effective date of deployment for several years post enactment. Even proponents of trade measures in the U.S. legislation have described them as “measure[s] of last resort.”⁶ Similarly, the relevant European directive does not provide the European Commission with the powers to actually implement trade measures, but only to propose them, starting the legislative process anew. Indeed, the U.S., the EU, and other developed nations (e.g. Australia and New Zealand) have favored other mechanisms such as the use of free emissions allowances as means of assisting energy-intensive and trade-exposed industries to preserve competitiveness and reduce the risks of emissions leakage (see Box 1).⁷

Trade Measures under the American Clean Energy and Security Act (ACESA)

The most fully articulated version of U.S. draft legislation, the American Clean Energy and Security Act (ACESA), contains border adjustment measures. ACESA’s scheme begins

by setting negotiating goals for the U.S. Administration. The bill provides that:

[i]t is the policy of the U.S. to work proactively under the United Nations Framework Convention on Climate Change, and in other appropriate fora, to establish binding agreements, including sectoral agreements, committing all major greenhouse gas-emitting nations to contribute equitably to the reduction of global greenhouse gas emissions.⁸

More specifically, under ACESA the U.S. Administration would be directed to achieve the following “negotiating objectives”:

- (1) to reach an internationally binding agreement in which all major greenhouse gas-emitting countries contribute equitably to the reduction of global greenhouse gas emissions;
- (2) (a) to include in such international agreement provisions that recognize and address the competitive imbalances that lead to carbon leakage and may be created between parties and non-parties to the agreement in domestic and export markets; and
 - (b) not to prevent parties to such agreement from addressing the competitive imbalances that lead to carbon leakage and may be created by the agreement among parties to the agreement in domestic and export markets; and
- (3) to include in such international agreement agreed remedies for any party to the agreement that fails to meet its greenhouse gas reduction obligations in the agreement.⁹

Thus, the U.S. would be seeking, in an international agreement, “equitable” efforts from major economies and remedies to enforce them. It would also seek specific provisions to address leakage concerns with regard to both parties and non-parties. If these negotiating objectives have not been met by January 2018, ACESA would trigger, no sooner than January 1, 2020, the establishment of a program of unilateral trade measures or “border adjustments”. In essence, the importer of a targeted product would be required to purchase US issued allowances equivalent to the allowances that would have been required of a US producer of the same product. The stated purposes of this program are:

- (1) to promote a strong global effort to significantly reduce greenhouse gas emissions, and, through this global effort, stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous anthropogenic interference with the climate system; and

(2) to prevent an increase in greenhouse gas emissions in countries other than the United States as a result of direct and indirect compliance costs incurred under this title.¹⁰

More specifically the border adjustment measures are intended to prevent free-riding by:

induc[ing] foreign countries, and, in particular, fast-growing developing countries, to take substantial action with respect to their greenhouse gas emissions consistent with the Bali Action Plan developed under the United Nations Framework Convention on Climate Change.¹¹

Importantly, ACESA also indicates that the purposes of the border adjustment program include ensuring trade measures “are designed and implemented in a manner consistent with applicable international agreements to which the United States is a party.” This includes, presumably, the WTO, the UNFCCC and any future international climate agreement the U.S. ratifies.¹² The relationship between the

proposed border measures UNFCCC and WTO rules is discussed below. The relationship between the measure and a future climate agreement will depend on the content of that agreement.

Under ACESA, the U.S. would determine which sectors in its economy are sufficiently energy or greenhouse gas (GHG) intensive and exposed to international trade to raise the risk of carbon leakage. From 2012, U.S. producers in these “eligible sectors” would receive free emissions allowances to address direct and indirect compliance costs.¹³ (See Box 1 for a discussion of the trade implications of these rebates and their links to border measures.) After 2020, border measures would be used if risks of leakage remain: importers of products in these “eligible sectors” would be required to purchase “International Reserve Allowances” from the U.S. government at a level that “minimizes the likelihood of carbon leakage” as a result of differences between compliance costs in the U.S. and compliance costs (if any) in the exporting country.¹⁴ Additionally, when implementing the border measures, the Environmental Protection Agency Administrator would be required to reduce the border adjustment “as low as to zero,” after accounting for the level of allowance rebates provided to domestic industries.¹⁵

Under ACESA, imports that originate from countries that meet one or more criteria would be exempt from the border adjustment. These criteria give an indication of what the U.S. will be looking for from its major trading partners in terms of “equitable contributions” to reduce GHG emissions. A country’s products would be exempt

Box 1 | Free Allowances as a Means of Addressing Competitiveness and Emissions Leakage

The third phase (post-2012) of the EU emissions trading scheme (EU ETS), legislation recently considered (and rejected) by the Australian Parliament,¹ and the U.S. ACESA would each provide free allowance allocation for energy-intensive, trade exposed manufacturers as the primary mechanism for preventing carbon leakage during the early years of domestic cap-and-trade policy. Approaches differ, however, under ACESA:

- Free allowances would be provided as compensation for both direct and indirect costs (which is also true of the Australian scheme, but not under the EU ETS);
- An individual U.S. facility’s allocation would be pegged to the sector average benchmark. All facilities that manufacture product while producing fewer emissions than the sector average would receive more allowances than would be needed to cover their direct and indirect compliance costs. On the other hand, the EU ETS would allocate allowances based on a benchmark that is pegged to the performance of the 10 percent most efficient facilities in the sector. Under the proposed Australian scheme, allowance allocation to individual facilities would be pegged to 90 percent and 60 percent of the sector average for the most and least emissions intensive sectors, respectively; and
- Unlike the EU and the Australian approach, there is no mechanism for review or allocation reduction before 2025, in the event that binding sectoral or other international agreements are negotiated to address the environmental or trade implications of carbon price disparities.

Free allowances, because they affect the competitive relationship between domestically produced and imported products could be subject to the jurisdiction of WTO rules as regulated and “actionable” subsidies. Two particular aspects of the free allowance scheme may be of particular concern under free trade rules: if they are designed and applied in such a way as to compensate regulated facilities beyond the costs of compliance with climate regulation, and if they are not subject to review and adjustment in light of improvements in climate regulation in other countries. The risks of a WTO Member challenging a free allowance scheme are difficult to assess, but to date subsidies are more widely used and are less likely to be challenged than border measures.

¹ Carbon Pollution Reduction Scheme: Australia’s Low Pollution Future; Volume 2. White Paper released Dec. 15, 2008.

from border measures if:

(1) The country is a party to an international agreement to which the U.S. is a party that includes a nationally enforceable and economy wide greenhouse gas emissions reduction commitment for that country that is *at least as stringent* as that of the United States [emphasis added].

(2) The country is a party to a multilateral or bilateral emission reduction agreement for that sector to the [sic] which the United States is a party.

(3) The country has an annual energy or greenhouse gas intensity . . . for the sector that is *equal to or less than* the energy or greenhouse gas intensity for such industrial sector in the United States in the most recent calendar year for which data are available [emphasis added].¹⁶

Products from *least developed countries* and countries responsible for a *de minimis* (less than 0.5%) level of global GHG emissions and less than 5% of U.S. imports in the relevant sector would also be exempt from border adjustment.¹⁷

In Europe, the use of trade measures as part of domestic climate policy has gained some traction as well. First conceived as a response to U.S. rejection of the Kyoto Protocol, trade measures are now seen by some as a means of preventing emissions leakage and a loss of competitiveness. After the European Commission published its first proposals for the third phase (post-2012) of the EU emissions trading scheme (EU ETS) in January 2008, concerns about competitiveness, leakage, and a need to assess whether producers of energy-intensive products from trading partners were on a “comparable footing” played an important role in the European policy debate. The amended ETS directive, adopted in December 2008, provides for continued free allocation of emissions allowances for industries exposed to

carbon leakage and does not include border measures. However, the directive also outlines a procedure for further revisions if they are necessary to reflect the outcome of international negotiations or the emergence of binding sectoral agreements.

The European Commission is required to prepare a report by June 2010, analyzing the situation of energy-intensive industries that have been determined to be exposed to significant risks of carbon leakage. Based on this report, the Commission will make proposals to the Council and Parliament for changes to the directive which could include border adjustment mechanisms. In particular, the directive states that the Commission can propose “equalization measures” that would impose requirements upon importers of energy intensive goods. The directive specifies that these mechanisms must be designed to be no more stringent than the requirements put on domestic manufacturers, and should be designed to be consistent with commitments made under the UNFCCC and WTO.¹⁸

Trade Measures in the Context of the UNFCCC

The UNFCCC anticipates that a Party to the Convention might resort to unilateral trade measures when addressing the problems of climate change, but that such measures would need to be designed in accordance with agreed principles. Fossil fuels, energy-intensive, and energy-related products are heavily traded goods, and there is a risk that, without these guidelines, climate policy could be used to disguise trade measures aimed primarily at protecting domestic industries, rather than at reducing emissions.

To avoid this, Article 3.5 of the UNFCCC provides that:

The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. *Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade* [emphasis added].

This language draws directly from the text of the General Agreement on Tariffs and Trade (GATT), now part of the WTO, a free trade regime of which most UNFCCC Parties are also Members.¹⁹ WTO rules are designed to reduce tariff and non-tariff barriers to trade and to prohibit the discriminatory use of trade measures. These rules are backed by a compulsory and binding dispute settlement system that can authorize trade sanctions against Members found in non-compliance. Article 3.5 was included in the UNFCCC to ensure, as much as possible, that trade measures taken

by UNFCCC Parties to implement the Convention are consistent with the GATT.

Since the adoption of the UNFCCC in 1992, policymakers and academics have speculated about what kinds of trade measures a Party might put in place to advance climate change objectives, whether such measures might be challenged under the WTO's dispute settlement system, and whether a WTO dispute settlement panel would find these measures to be compatible with free trade rules.²⁰ As has been described above, this speculation has been made more concrete by the inclusion of the specific trade measures in proposed U.S. climate legislation and in EU policies.

Policymakers in developed countries are conscious of the constraints on the use of trade measures imposed by the WTO (and echoed in the UNFCCC) and the need to avoid "arbitrary or unjustifiable discrimination or disguised restriction on international trade." Proponents of trade measures have sought to align their design and justification with the language of WTO case law which is an important source of guidance on how to interpret WTO rules. For example, U.S. proponents have advanced policies that would substantially delay implementation of border measures, to allow sufficient time for good faith negotiations between affected parties.²¹ Nevertheless, under ACESA, U.S. policy would distinguish between two otherwise physically identical products on the basis of the climate policy or the GHG emissions profiles of the exporting country. Such measures are discriminatory on their face, and would violate the WTO rules that prohibit discrimination between like products on the basis of country of origin. Most commentators, even those supporting the inclusion of these provisions in Annex I policies, have acknowledged that they would constitute a prima facie violation of WTO rules. To survive a WTO challenge, the measures would therefore have to qualify for an environmentally related "exception" to WTO rules.²²

Qualifying for an environmentally related exception under the WTO requires a two-step

test. First, the measure must be provisionally justified as falling within the scope of one of several specific policy objectives recognized as legitimate, it must then be justified as being applied in a manner that is not "arbitrary, unjustifiable or a disguised restriction on trade." Most academic analysis has suggested that climate change policy would be most readily defensible as related to the conservation of the regulating capacity of the climate system – an exhaustible natural resource. (A previous WTO panel has ruled that clean air is a valuable and exhaustible natural resource).²³

While combating climate change would likely qualify as a legitimate policy objective, would the ACESA border measures be considered sufficiently related to the reduction of greenhouse gas emissions? The WTO dispute settlement report that has been relied upon most heavily to predict how a WTO Panel might analyze a climate-related trade measure is the so-called "Shrimp/Turtle" dispute,²⁴ which confirmed that there should be a "substantial relationship" between the measure and the objective.²⁵ When assessing the relationship between a U.S. import ban on shrimp, designed to encourage exporting countries to adopt regulations that were comparable to those adopted in the U.S., the WTO Appellate Body found that the ban was reasonably related to the ends.²⁶ The ACESA border measures, which would also be enforced through an import ban, have been rationalized by proponents as achieving one or more ends: (1) reducing the "leakage" of greenhouse gas emissions from a country where the price on carbon is high, to one where it is lower, which could undermine the effectiveness of domestic climate policies; (2) encouraging the country of export to reduce its emissions; (3) bringing free-riders into an international agreement; (4) providing temporary assistance to trade exposed energy intensive industries transition to a low carbon economy; and (5) protecting these same industries from the competitiveness effects of the costs of compliance.

As has been argued elsewhere, it is unlikely that the ACESA border measures would create sufficient leverage on any significant exporter of carbon-intensive goods to compel another country undertake a comparable cap on greenhouse gases.²⁷ For instance, less than one percent of Chinese steel production is exported to the U.S., which makes it unlikely that a unilateral trade measure applied by the U.S. would create a strong enough incentive for the Chinese government to apply regulations to the steel sector, let alone the entire economy. Likewise, it will be difficult to develop measures that are sufficiently targeted to incentivize individual firms to adopt less carbon-intensive production processes.²⁸ Thus, the most defensible use of border measures would be to impose comparable costs on importers as imposed on domestic producers.

The second part of the Article XX test requires the importer to show the trade measure is not being applied "a means of arbitrary or

unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on trade.” In the Shrimp/Turtle dispute, several Asian countries challenged a U.S. ban on shrimp imported from countries the U.S. had unilaterally determined were failing to protect sea turtles from drowning in shrimping nets in a manner *essentially the same* as required of U.S. shrimpers. The U.S. trade measures were eventually upheld by the WTO Appellate Body only when the U.S. adjusted its regulation to allow greater flexibility to shrimp importers. The Appellate Body found that when the U.S. shifted its standard from requiring measures essentially the same as U.S. measures to “the adoption of a program *comparable* in effectiveness,” this new standard would comply with WTO disciplines. As Hufbauer et al. note, in the compliance litigation that followed on from the Appellate Body’s ruling:

[t]he WTO panel stated that the WTO agreement “does not provide for any recourse” to an exporting country in a situation where another WTO Member requires “as a condition of access of certain products to its market, the exporting countries commit themselves to a regulatory program deemed comparable to its own.”²⁹

Thus the Shrimp/Turtle case opens the door for U.S. climate legislation that bases trade measures on an evaluation of the “comparability” of climate policies taken by other countries, but cannot require that these policies to be essentially the same.

Border measures included in earlier versions of draft U.S. legislation featured the concept of “comparability” prominently. ACESA does not use the term “comparable” to assess in which cases trade measures should be applied. Instead, it refers generally to the objective of achieving “equitable” contributions to emissions reductions from developing countries.

GATT Article XX appears to reflect both concepts of comparability and equitable

treatment of countries in different circumstances. In Shrimp/Turtle the Appellate Body held that discrimination can result “not only when countries in which the same conditions prevail are differently treated, but also when the application of the measure at issues does not allow for any inquiry into the appropriateness of the regulatory program for the conditions prevailing in those exporting countries.”³⁰

Article 3 of the UNFCCC requires its Parties to be guided by the principle of equity in their actions to achieve the objective of the Convention and to implement its provisions:

The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of *equity* and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof [emphasis added].³¹

So, would ACESA border measures be applied in such a way that met the WTO and/or the UNFCCC standards of equity? As has been described, imports from otherwise eligible sectors will be exempted from border measures under ACESA if the country of origin is a Party, alongside the U.S., to a binding economy-wide reduction commitment under an international agreement that was “at least as stringent as” that accepted by the U.S.; if it is a Party, alongside the U.S., to a bilateral or multilateral agreement aimed at emissions reductions in the specific sector (i.e. sectoral agreements); if its energy or emissions intensity in the relevant sector was “equal to or less than” that of the U.S.; or if it is a Least Developed Country or its emissions are below the de minimis percentage of 0.5% while their share of U.S. imports in the respective sector that is below 5% is excluded from the program.

The reference to international agreements and the use of the term “equitable” in the ACESA could suggest a nuanced view of comparability, consistent with the UNFCCC, that takes into account principles of common but differentiated responsibility; capability; and relevant social, economic, and environmental circumstances within the exporting country such as per capita emissions, per capita income, access of the poor to energy services, or historical emissions. The exclusion of LDC’s from border measures is consistent with widely shared principles of equity in the context of both trade and environment.³²

On the other hand, the test based on the content of international agreements, while allowing flexibility in terms of implementation, does not appear to reflect widely-shared understandings of what is “equitable” in the context of climate change. The “as stringent as”

test set for the obligations under an international climate agreement, if it is measured by the aggressiveness and scope of targets and timetables, or equivalence in compliance costs incurred in developing countries, would be very difficult to achieve under the current dynamic of the climate negotiations. The sectoral agreement test, by setting no particular standards or definitions for what constitutes an “agreement,” provides presidential discretion regarding the structure, scope, and details of any such agreement, which would exempt from border measure imports any relevant sectors and countries covered by the agreement.

The “equal to or less than” test of energy or greenhouse gas intensity in relevant sectors assesses outcomes rather than policies in the country of origin. While outcomes vary from sector to sector, country to country, high efficiency in GHG and energy intensive sectors does not, generally, correlate with low levels of economic development. This suggests, again, that some of the ACESA tests seem to be inconsistent with the equity principle in the UNFCCC. Even if developing countries agreed to fairly aggressive actions under a post-2012 agreement, these actions could still fail the tests that have evolved in U.S. proposals. As has been described, ACESA contains a provision that indicates the purpose of the border adjustment program are designed and implemented in a manner consistent with applicable international agreements to which the United States is a party, and instructs the administration to establish the program in this manner.³³

This provision could be interpreted to require the administration to take into account the results of an international climate agreement in its interpretation of the “at least as stringent” test in the context of the UNFCCC principle of “equity.” Such an interpretation could for instance take “at least as stringent” to mean comparable per capita emissions or a comparable burden, taking into account levels of development and historical responsibility. This would, in effect, exempt from trade measures any country that was a Party to and in

compliance with a multilaterally agreed post-2012 climate agreement to which the U.S. was also a Party. Excluding all Parties from trade measures could, however, blunt the effectiveness of the trade measure in addressing competitiveness or leakage.

As described above, it is difficult to effectively use trade measures to exert leverage on third countries to join an agreement or accept more ambitious targets. It has therefore been proposed to tailor trade measures more narrowly on prevention of emissions leakage, and to avoid a test based on countries’ domestic climate policies. These alternative proposals attempt to target potential carbon price disparities directly by adjusting them at the border for all carbon-intensive products regardless of country of origin.³⁴ They focus solely on addressing emissions leakage by creating incentives for individual firms to change production methods rather than attempting to coerce governments into changing policy.

Measures targeting leakage can be distinguished from those targeting competitiveness because they are designed to allow a country to meet its domestic environmental objectives by imposing a carbon price at the border equivalent to that faced by a domestic producer. But this price must be imposed equitably, based on the carbon-intensity of a given firm’s production methods, which means that domestic companies that are dirtier than their foreign competition would still see their competitiveness erode.

While this approach avoids the risks of one UNFCCC Party unilaterally reviewing another’s policy, proponents may still face the challenge of demonstrating to the WTO that prevention of leakage is a legitimate policy objective and that leakage would have occurred in absence of the trade measure. The UNFCCC has never debated whether the use of unilateral trade measures to discourage “leakage” would meet the standards of Article 3.5. The common but differentiated nature of commitments under the UNFCCC and the Kyoto Protocol and the large degree of freedom Parties have in deciding through which policies they reach their obligations means carbon prices will undoubtedly differ, not only between developed and developing countries but among developed countries themselves. This creates the risk of emissions leakage. The principle of common but differentiated responsibility also suggests that Parties have thus far been prepared to tolerate, for some period of time, these significant differences in the costs of compliance between developed and developing countries.

In the run-up to the Copenhagen conference, developing country Parties have called for an explicit clarification that unilateral trade measures cannot be used on climate grounds. At the negotiation session in Bonn in August 2009, India has put forward text to be included in the negotiated outcome that reads:

Developed country Parties shall not resort to any form of unilateral measures including countervailing border measures, against goods and services imported from developing countries on grounds of protection and stabilisation of climate. Such unilateral measures would violate the principles and provisions of the Convention, including, in particular, those related to the principle of common but differentiated responsibilities (Article 3, Paragraph 1); trade and climate change (Article 3 paragraph 5); and the relationship between mitigation actions of developing countries and provision of financial resources and technology by developed country Parties (Article 4, Paragraphs 3 and 7).³⁵

China has proposed similar text. Both proposals have received broad support from developing countries.³⁶ In a draft declaration released by India, China, Brazil and South Africa on November 28, 2009, the four countries qualify “the use of climate change as a trade barrier” as non-negotiable.³⁷

However, it would theoretically be possible that the UNFCCC agreed that an individual country has the right to guard against emissions leakage as a means of meeting its own commitments under a post-2012 agreement. There is wide range of research and views on how significant the issue of leakage is from a global perspective.³⁸ Most of this research agrees that leakage is less of a problem for the entire economy, but rather for a small subset of energy-intensive sectors. For some Annex I countries where industry accounts for a large share of total emissions, however, there are concerns it may be difficult to achieve significant reductions without either imposing a carbon price at the border or outsourcing pollution-intensive activities to developing countries.

The issue of preventing emissions leakage is increasingly becoming a feature of international negotiations. Both the negotiating objectives contained in current U.S. climate legislation which would require the U.S. administration to begin negotiations on multilateral leakage rules, as well as the Indian and Chinese proposals to agree on a ban of unilateral trade measures, point in this direction.

Box 2 | The Persistent Interest in Border Measures of the U.S. Senate: The Clean Energy Jobs and American Power Act

On November 5, 2009, the U.S. Senate passed the Clean Energy and American Power Act (CEJAPA) out of Committee on Environment and Public Works. Since only Democrats were present for the vote, Committee rules prohibited consideration of numerous amendments offered by committee members. CEJAPA is very similar in structure and ambition to the House bill, ACESA, though sponsors of the legislation and committee members made several noteworthy modifications, including the inclusion of more aggressive 2020 greenhouse gas emissions targets (20% versus 17% below 2005 levels).

Another important difference is that CEJAPA only includes placeholder language on border measures because such policies fall more squarely within the jurisdiction of the Senate Committee on Finance, which oversees U.S. tax and trade laws and is chaired by the Senior Senator from Montana, Max Baucus. Senator Baucus was the only Senator to vote against passage of the CEJAPA out of the Environment Committee, in part because he offered several amendments that were not put up for a vote. However, Senator Baucus has made several public statements of support for climate policy, wherein he has pledged to work with his colleagues to pass a revised bill through the Senate in the coming months.

Though otherwise generally considered to be a free-trade policy proponent, just days after the bill passed through the Environment Committee, Chairman Baucus said:

“We must push our trading partners to do their part to curb harmful emissions and we must devise a border measure, consistent with our international obligations, to prevent the carbon leakage that would occur if U.S. manufacturing shifts to countries without effective climate change programs.”

(Box 2 continued on page 10)

Box 2 | The Persistent Interest in Border Measures of the U.S. Senate: The Clean Energy Jobs and American Power Act

Though the details of his draft border measure provisions are not yet public, Senator Baucus' approach to questions of equity and comparability in the context of international climate policy are illustrated through some of the amendments that he drafted for consideration in committee. In particular, one draft amendment from Senator Baucus proposes to make U.S. commitments to domestic and international climate action contingent on the commitments and actions of developed countries and emerging economies.¹

For example, Baucus proposes to increase, from 14 percent to 20 percent below 2005 levels, U.S. greenhouse emissions reductions in 2020, if developed countries:

- 1) make international commitments, backed by domestically enforceable laws and programs to achieve comparable reductions in greenhouse gas emissions relative to those expected to be achieved under laws and programs of the United States, taking into account the increased mitigation that would be achieved under this title; ...
- 2) are making progress in implementing those commitments; ...
- 3) and have committed to participate in robust measurement, reporting, and verification procedures relating to domestic emission reduction actions.

In the same draft, Senator Baucus proposed to cut-off climate-related financing for major emerging economies if, upon periodic review, the President certifies that a major emerging economy is not living up to MRV commitments:

- 1) make international commitments, backed by domestically enforceable laws and programs, to implement actions reflecting a substantial, quantifiable reduction from business-as-usual emission pathways of the major emerging economies consistent with achieving global goals for 2050; and
- 2) are making progress in implementing those commitments.

¹ The Office of Senator Max Baucus, Personal Communication.

Risks of a Dispute both for Climate and Trade

The divergence between international climate negotiations and domestic climate policy developments in Annex I countries creates significant risks for both the UNFCCC and the global trading system. Trade measures currently proposed in the U.S. (and to a lesser extent Europe) are aimed at encouraging broader participation in a post-2012 climate treaty. Yet as mentioned above, these measures could be imposed on any country, including a developing country Party to an international climate agreement. If such trade measures were challenged under the WTO, as they likely would be, both the trade and the climate agreements could be undermined.

Although Article 3.5 of the UNFCCC draws upon WTO, the Convention does not refer or defer to the WTO as the mechanism that would have the authority to interpret Article 3.5, or to assess the legality of climate related trade measures. The COP, the UNFCCC's "supreme body," has the authority to "make, within its mandate, the decisions necessary to promote the effective implementation of the Convention."³⁹ The UNFCCC, under Article 14, allows Parties to sign up to a process that could have resolved disputes "between any two or more Parties concerning the interpretation or application of the Convention," but no Party has taken up this option to date. Thus, if a dispute were to arise between two Convention Parties that were also WTO Members, the WTO's compulsory dispute settlement mechanism would have to adjudicate the issue. As has been discussed, if the Party imposing trade measures argued that such barriers were justified under the environmental exceptions of Article XX, a WTO panel would be required to make an assessment of the environmental effectiveness of the measure, as well as

whether the measure was being applied in a rational and justifiable manner. Given the complexity of such an assessment, the WTO would likely look to the UNFCCC for guidance on an appropriate standard for the “equity” or “comparability” of actions to reduce emissions, as well as for an appropriate standard for assessing whether the trade measure constituted, under WTO and Climate law, a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.

While this Working Paper does not express a view on whether the proposed U.S. and EU measures would pass such a WTO test, the analysis would be far from straightforward. Much of the political discourse around the inclusion of trade measures has been as much about protecting domestic industry as it has been about preventing leakage, which makes such measures vulnerable to the charge of disguised protectionism. A WTO panel might be forced to choose between a result that required the U.S. to dismantle a central part of its climate legislation, and one that allowed the U.S. measure to stand, but that undermined UNFCCC’s legitimacy in setting and distributing climate targets between its Parties. And given the tenuous state of the global trading system at present with the failure of the Doha round, such a determination could significantly weaken faith in the WTO itself.

Multilateral Guidance from the Climate Negotiations

Given the likely inclusion of trade measures in domestic climate legislation in Annex I countries, and the prospect that these would be challenged at the WTO, the COP should seek to clarify the meaning of Article 3.5 and establish guidelines for the use of trade measures in a way that is consistent with the goals of both the UNFCCC and the multilateral trading system. Doing so could:

- Maintain a degree of multilateral discipline over the use of unilateral trade measures.
- Send a clear signal to legislators in Annex I countries that these measures should be shaped by multilateral consultation and negotiation.

- Avoid the potential chilling effect on environmentally justifiable unilateral trade measures that would result from an implicit deference to the WTO’s dispute settlement mechanism as the arbiter of comparability, equity, and effectiveness of climate policy.
- Reaffirm the view that WTO and climate objectives and principles can be mutually supportive in discouraging protectionism in the design and use of trade-related climate policy.

RECOMMENDATIONS FOR DISCUSSION

We recommend that the UNFCCC Parties begin to negotiate in Copenhagen on an elaborated set of principles, based on Article 3.5 of the Convention, which would provide authoritative guidance on Parties’ use of trade measures, and would help to avoid and to guide the resolution of any disputes that might arise between Parties. Such principles would take into account the opposition to unilateral border measures expressed by developing countries by setting multilateral disciplines. They would also address the need perceived by some developed countries to be able to use some form of border measures if emissions leakage threatens to undermine the effectiveness of their domestic climate policies. At a minimum, these principles should:

- Secure the express acknowledgment of all Parties to an international climate agreement that the commitments or actions that are contained in that agreement reflect the international standard for what is a comparable and equitable level of effort expected of Parties during the timeframe of those commitments.
- Reaffirm that neither the UNFCCC nor the WTO supports the use of trade measures as a means of protecting domestic industry from competition and that any trade measures used to advance the implementation of the UNFCCC must be narrowly tailored to achieve a legitimate environmental objective.
- Clarify whether the use of trade measures to prevent emissions leakage between Parties is a legitimate environmental objective as part of domestic efforts to meet commitments under an international climate agreement.
- Guide the use of trade measures against non-Parties or Parties not in compliance with their commitments under an international climate agreement.
- Promote the exercise of diplomacy before any unilateral trade measures are resorted to.
- Require transparency, predictability, and consistency in the design and application of any trade measures.

- Ensure respect for the special and differential treatment of developing country Parties based on their level of development.

ACKNOWLEDGMENTS

The authors would like to thank the following colleagues who provided valuable comments and editorial support for this work: Paul Joffe, Christina Deconcini, Janet Ranganathan, Alisa Zomer and Kirk Herbertson. The views expressed are the authors'.

ABOUT THE AUTHORS

Jacob Werksman is the Program Director of WRI's Institutions and Governance Program. He can be reached at jwerksman@wri.org.

James Bradbury is a Senior Associate in WRI's Climate and Energy Program. He can be reached at jbradbury@wri.org.

Lutz Weischer is a Research Analyst in WRI's Climate and Energy Program. He can be reached at lweischer@wri.org.

ABOUT WRI

The World Resources Institute (WRI) is an environmental think tank that goes beyond research to create practical ways to protect the Earth and improve people's lives.

NOTES

¹ This Working Paper updates a Discussion Paper entitled "Competitiveness, Leakage and Comparability: Disciplining the Use of Trade Measures under a Post-2012 Climate Agreement" co-authored by J Werksman and T Hauser and published in December 2009, which focused on a previous version of draft U.S. legislation. For a more detailed discussion of some of the arguments in this Working Paper, see, T Houser, R Bradley, B Childs, J Werksman and R Heilmayr, *Leveling the Carbon Playing Field: International Competition and U.S. Policy Design* (WRI and PIIE: 2008)[hereinafter "Leveling the Carbon Playing Field"].

² The American Clean Energy and Security Act of 2009, H.R. 2454, July 6 2009, [hereinafter "ACESA."] ACESA, sec 766 (a)(1).

³ ACESA, sec 767 (c)(1), 768 (a)(1)(E).

⁴ We use the term "free-riding" advisedly. While uncapped countries and companies might gain short term comparative advantages through lower production costs, if significant amounts of global emissions remain uncapped there may be few benefits generated from capping emissions to "free-ride."

⁵ Testimony of Environmental Defense Fund, International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers & Helpers, Point Carbon North America, and Holcim, Inc, Before the Committee on Finance, February 14, 2008,

<http://finance.senate.gov/sitepages/hearing021408.htm>.

⁶ Testimony to the Committee on Energy and Commerce by American Electric Power, March 18, 2009.

⁷ See e.g., Testimony to the Committee on Energy and Commerce by John McMackin, March 18, 2009.

⁸ ACESA, sec 765(b).

⁹ ACESA, sec 766.

¹⁰ ACESA, sec 761(a).

¹¹ ACESA, sec 761(c)(1).

¹² ACESA, sec 761(c)(2).

¹³ A list of eligible sectors and more extensive analysis of allowance rebate provisions can be found in: *The Effects of H.R. 2454 on International Competitiveness and Emission Leakage in Energy-Intensive Trade-Exposed Industries*. An Interagency Report Responding to a Request from Senators Bayh, Specter, Stabenow, McCaskill, and Brown. December 2, 2009. <http://epa.gov/climatechange/economics/economicanalyses.html>.

¹⁴ ACESA, sec 768(a)(2).

¹⁵ ACESA, sec. 768(b).

¹⁶ ACESA, sec 767.

¹⁷ ACESA, sec 768(a)(E).

¹⁸ The relevant article is 10b (1): "1. By 30 June 2010, the Commission shall, in the light of the outcome of the international negotiations and the extent to which these lead to global greenhouse gas emission reductions, and after consulting with all relevant social partners, submit to the European Parliament and to the Council an analytical report assessing the situation with regard to energy-intensive sectors or sub-sectors that have been determined to be exposed to significant risks of carbon leakage. This shall be accompanied by any appropriate proposals, which may include: (a) adjustment of the proportion of allowances received free of charge by those sectors or sub-sectors under Article 10a; (b) inclusion in the Community scheme of importers of products which are produced by the sectors or sub-

sectors determined in accordance with Article 10a; [...]. Any binding sectoral agreements which lead to global greenhouse gas emissions reductions of the magnitude required to effectively address climate change, and which are monitorable, verifiable and subject to mandatory enforcement arrangements shall also be taken into account when considering what measures are appropriate." Recital 25 of the legislative resolution specifies: "Energy-intensive industries which are determined to be exposed to a significant risk of carbon leakage could receive a higher amount of free allocation or an effective carbon equalisation system could be introduced with a view to putting installations from the Community which are at significant risk of carbon leakage and those from third countries on a comparable footing. Such a system could apply requirements to importers that would be no less favourable than those applicable to installations within the Community, for example by requiring the surrender of allowances. Any action taken would need to be in conformity with the principles of the UNFCCC, in particular the principle of common but differentiated responsibilities and respective capabilities, taking into account the particular situation of Least Developed Countries (LDCs). It would also need to be in conformity with the international obligations of the Community, including the obligations under the WTO agreement."

¹⁹ The text of Article 3.5 of the UNFCCC is drawn from the 1994 General Agreement on Tariffs and Trade, Article XX, the "General Exceptions" article.

²⁰ See, for example, G Hufbauer, S Charnovitz, J Kim, *Global Warming and the World Trading System*, (PIIE: March 2009) [hereinafter Hufbauer, et al]; S Charnovitz, *Trade and Climate Change: Potential Conflicts and Synergies* (Pew Center on Climate, 2003); J Pauwelyn, *U.S. Federal Climate Policy and Competitiveness Concerns: the Limits and Options of International Trade Law*. Duke University, Nicholas Institute for Environmental Policy Solutions, NI WP 0702, April 2007.

²¹ Testimony to the Committee on Energy and Commerce by American Electric Power, March 18, 2009.

²² See, for example, A. Shoyer, *Comments on WTO Consistency of International Reserve Allowance Program*, paper presented at the Canadian Council on International Law, September 2008.

²³ See Hufbauer et al, pp 49-60. *United States – Standards for Reformulated and Conventional Gasoline*, Report of the Panel, WT/DS2/R, para 6.37.

²⁴ *United States-Import Prohibition of Certain Shrimp and Shrimp Products*, Report of the Appellate Body, WT/DS58/AB/R and WT/DS58/AB/RW.

²⁵ *Ibid*, p 19.

²⁶ *United States-Import Prohibition of Certain Shrimp and Shrimp Products*, Report of the Appellate Body, WT/DS58/AB/R, paras 141-142.

²⁷ *Leveling the Carbon Playing Field*, chapter 3.

²⁸ *Ibid*.

²⁹ Hufbauer, et al, at p 50, citing *United States – Import Prohibitions of Certain Shrimp and Shrimp Products*, Recourse to Article 21.5 by Malaysia, WT/DS58/RW, para 5.103.

³⁰ *United States-Import Prohibition of Certain Shrimp and Shrimp Products*, Report of the Appellate Body, WT/DS58/AB/R, para 164.

³¹ UNFCCC, Art 3.1.

³² Both the UNFCCC and the WTO exclude LDCs from major commitments and provide them with preferential treatment.

³³ ACESA, sec 768 (a)(2).

³⁴ See, for example, K Neuhoff and R Ismer, *Border tax adjustment: a feasible way to support stringent emission trading*, *Eur J Law Econ* (2007) 24:137–164.

³⁵ See Third World Network, "Unilateral trade measures to protect climate change violate climate treaty – say developing countries", *TWN News Update No. 7*, 13 August 2009. This text is also included in the most recent compilation of texts published by the UNFCCC on 20 November 2009 after the Barcelona negotiation session. It is obviously bracketed to reflect the fact that consensus has not been reached. See Annex III.F to Document FCCC/AWGLCA/2009/14, page 114, paragraph 3, Alternative 1.

³⁶ While India had proposed to include this language in the section of the negotiating text that deals with "economic and social consequences of response measures", China suggested to include it in the more prominent section on "shared vision." See South Center, "India, G77 Propose Text Against Trade Protection in Copenhagen Draft", *South Bulletin* (40), 10 September 2009. Also see Annex I to Document FCCC/AWGLCA/2009/14, pages 14-15, Content of non-paper no. 33, paragraph 12.

³⁷ See, *The Hindu*, "India, China ready climate draft", 29 November 2009.

³⁸ For more discussion of emissions leakage, see *Leveling the Carbon Playing Field*.

³⁹ The Convention also provides that "[i]n the event of a dispute between any two or more Parties concerning the interpretation or application of the Convention, the Parties concerned shall seek a settlement of the dispute through negotiation or any other peaceful means of their own choice." UNFCCC, Article 14.