



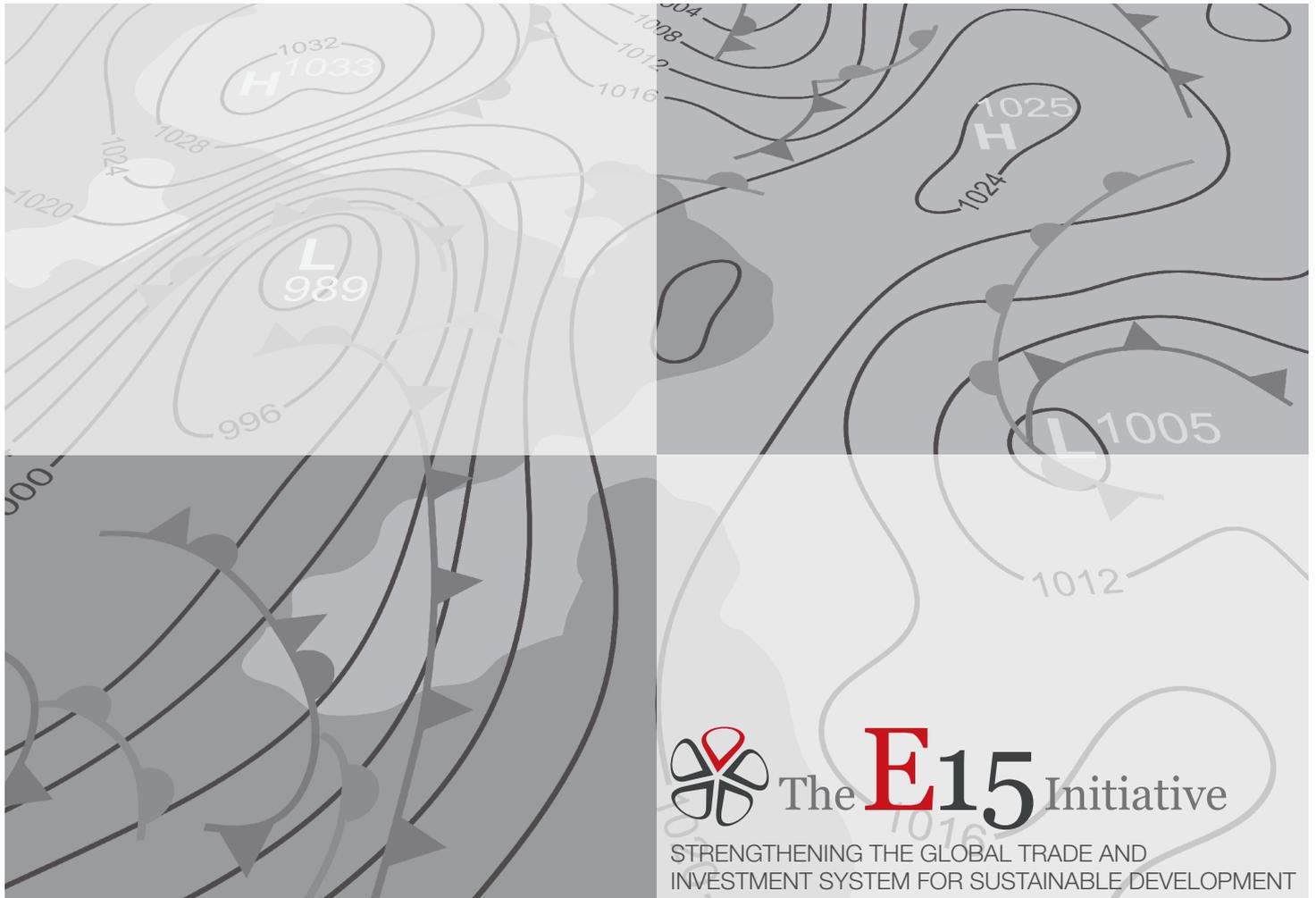
International Centre for Trade  
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# Global Rules for Mutually Supportive and Reinforcing Trade and Climate Regimes

Policy Options Paper



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# Global Rules for Mutually Supportive and Reinforcing Trade and Climate Regimes

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on behalf of the E15 Expert Group on Measures to Address Climate Change and the Trade System

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## Note

The policy options paper is the result of a collective process involving all members of the E15 Expert Group on Measures to Address Climate Change and the Trade System. It draws on the active engagement of these eminent experts in discussions over multiple meetings as well as think pieces commissioned by the E15 Initiative and authored by group members. James Bacchus led the Expert Group and provided intellectual guidance. Thomas L. Brewer, Henry Derwent, and Ingrid Jegou formed the core team and contributed significantly to the process and final paper. The policy options offered for consideration should not be taken to represent full consensus on any or all of the offered options. The list of group members and E15 papers are referenced.

The full volume of policy options papers covering all topics examined by the E15 Initiative, jointly published by ICTSD and the World Economic Forum, is complemented with a monograph that consolidates the options into overarching recommendations for the international trade and investment system for the next decade.

The E15 Initiative is managed by Marie Chamay, E15 Senior Manager at ICTSD, in collaboration with Sean Doherty, Head, International Trade & Investment at the World Economic Forum. The E15 Editor is Fabrice Lehmann.

## E15 Initiative

Jointly implemented by the International Centre for Trade and Sustainable Development (ICTSD) and the World Economic Forum, the E15 Initiative was established to convene world-class experts and institutions to generate a credible and comprehensive set of policy options for the evolution of the global trade and investment system to 2025. In collaboration with 16 knowledge partners, the E15 Initiative brought together more than 375 leading international experts in over 80 interactive dialogues grouped into 18 themes between 2012-2015. Over 130 overview papers and think pieces were commissioned and published in the process. In a fast-changing international environment in which the ability of the global trade and investment system to respond to new dynamics and emerging challenges is being tested, the E15 Initiative was designed to stimulate a fresh and strategic look at the opportunities to improve the system's effectiveness and advance sustainable development. The second phase of the E15 Initiative in 2016-17 will see direct engagement with policy-makers and other stakeholders to consider the implementation of E15 policy recommendations.

## E15 Initiative Themes

- Agriculture and Food Security
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- Climate Change
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- Finance and Development
- Fisheries and Oceans
- Functioning of the WTO
- Global Trade and Investment Architecture\*
- Global Value Chains
- Industrial Policy
- Innovation
- Investment Policy
- Regional Trade Agreements
- Regulatory Coherence
- Services
- Subsidies

\* Policy options to be released in late 2016

For more information on the E15 Initiative:

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# Abstract

As the world intensifies its search for global solutions for climate change, far too little attention has been paid in global policy-making to the nexus between climate change and international trade. In particular, important opportunities for the trade system to contribute to addressing climate change have been overlooked. The overriding message addressed to both trade negotiators and climate negotiators in the present paper is that they must begin by acknowledging the inseparability of the two issues with the aim of framing global rules on trade and on climate that are mutually consistent, supportive, and reinforcing. With this objective in mind, the analysis behind the policy options centres on the interface between national and international measures taken to address climate change and the global rules of the WTO-based multilateral trading system. Where proposed climate rules are concerned, the main focus is on possible approaches that may have trade implications or that may otherwise be affected by the rules or rulings of the WTO. Where current or proposed trade rules are concerned, the focus is equally on the affirmative

ways that trade and trade rules can be used to advance climate actions, and on suggesting ways to avoid the potential collisions that may occur with the current trade regime when taking climate actions. The policy options are arranged in six subcategories: maximizing the ways trade can address climate change while minimizing conflicts between the trade and climate regimes; recognizing embedded carbon in trade and revisiting the concept of “like” products; fostering climate action through enabling the formation of climate clubs and coalitions; finding an agreed framework for emissions trading, carbon taxes, and border measures; making use of subsidies, standards, government procurement, and intellectual property; and, fostering sectoral approaches, including maritime shipping and aviation. The paper concludes that the policy options for dealing with the nexus of trade and climate change will only succeed if significant additional efforts are made by the trade and climate regimes to work together on behalf of the overriding global goals for sustainable development.

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Abbreviations	
ASCM	Agreement on Subsidies and Countervailing Measures
COP	Conference of the Parties
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GPA	Government Procurement Agreement
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
MC	Ministerial Conference
PPM	process and production method
TBT	Technical Barriers to Trade
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UNFCCC	United Nations Framework Convention on Climate Change
WTO	World Trade Organization

# Executive Summary

Trade rules and climate realities are rapidly approaching a crossroads. As the world intensifies its search for global solutions for climate change, far too little attention has been paid in global policy-making to the nexus between climate change and international trade. In particular, important opportunities for the trade system to contribute to addressing climate change have been largely overlooked. The E15 Expert Group on Measures to Address Climate Change and the Trade System, jointly convened by ICTSD and the World Economic Forum in partnership with Climate Strategies, has sought to bridge this gap.

Our overriding message to trade negotiators and to climate negotiators alike about how best to meet the global challenge of reconciling our goals for trade and for climate change is that they must begin by acknowledging the inseparability of the two issues. Based on this mutual acknowledgment, they must each acknowledge, too, the essential legitimacy of the goals of the other, and they must begin now, belatedly, to communicate. This communication must aim at framing global rules on trade and on climate that are mutually consistent, mutually supportive, and mutually reinforcing.

## Background

Neither the goals of the long-established global trade regime nor those of the newly-emerging global climate regime can be accomplished unless the two worlds of trade and climate endeavour can come together to work as one. In the absence, so far, of any structured communication between the climate and trade worlds, there is a prevailing air of mutual apprehension. Climate advocates fear that trade rules will keep us from fighting climate change. Trade advocates fear that making allowances for fighting climate change in trade rules will lead to an endless procession of other causes seeking such special allowances, which could undermine a global trading system more than half a century in the making. There is also a prevailing mutual procrastination. Each of the climate and the trade worlds is waiting for the other to act first on the issues that concern them both. Against this backdrop, the Expert Group has scrutinized at length opportunities for the trade system to contribute to climate action, and also for the trade system to inform climate action.

For reasons perfectly understandable within the challenging context of the climate negotiations, it is no longer anticipated that a future climate agreement will include general obligations for national cuts in greenhouse gas

emissions. Instead of binding commitments on cutting carbon emissions, the envisaged Paris agreement would include only voluntary “[intended] nationally determined contributions.” It is not expected that there will be any real disciplines in the agreement relating to the making or the meeting of these commitments on “contributions.” Moreover, there will most likely not be any effective mechanism in the climate agreement for settling disputes about these “contributions.”

What may be most important for purposes of international trade law is that, to date, there has been virtually no discussion by either climate negotiators or delegates to the WTO of the specific kinds of national measures that could be seen as “climate measures” taken to fulfil these voluntary “contributions,” or of how those national measures could be reconciled with WTO law if they restricted or otherwise affected trade in goods or services and, thus, fell within the scope of the WTO treaty. Therefore, it can already be anticipated that there will, in the aftermath of the conclusion of the Paris Agreement, be no agreed way of judging whether a national “measure” should be exempt or not from what would otherwise be WTO trade obligations. This omission from the climate debate is critical, and it affects in a variety of ways many of the policy options presented in the paper.

To keep from opening a Pandora’s box of global protectionism, the unique issue of climate change must be addressed by the members of the WTO in ways that are likewise unique. In framing our policy options for dealing with this issue within the global trade system, our focus is on the interface between and among national and international measures taken to address climate change and the global rules of the WTO-based multilateral trading system.

Our very strong view is that global climate rules and global trade rules must be consistent in both conception and in application. They must likewise be consistent in enforcement. Where proposed climate rules are concerned, our main focus is on possible approaches that may have trade implications or that may otherwise be affected by the rules or rulings of the WTO. Where current or proposed trade rules are concerned, our focus in these policy options is equally on the many affirmative ways that trade and trade rules can be used to advance climate actions, and on suggesting ways to avoid the potential collisions that may occur with the current trade regime when taking climate actions. The policy options are arranged in six subcategories between which there are a number of overlaps.

## Policy Options

*Maximizing the ways trade can address climate change while minimizing conflicts between the trade and climate regimes.* Most of the opportunities trade offers in the common struggle against climate change are currently being missed. The effort to address climate change must occur not only within the UNFCCC; it must also occur within the global trade system. There are a whole array of ways the WTO and other trade arrangements can be used affirmatively to maximize trade as a positive force in fighting and forestalling climate change. At the same time, it is necessary to anticipate potential conflicts and to prevent legal collisions between WTO rules and national and international measures taken to address climate change. The seven options offered in this subcategory deal with what can be anticipated as a legal overlap between the existing WTO-based trade regime and the various combinations of newly constructed climate regimes that may emerge.

*Recognizing embedded carbon in trade and revisiting the concept of “like” products.* The concept of “like” products is part of the foundation of the trade system. The determination of “likeness,” which has been the subject of endless jurisprudence, has not been made on the basis of how products are made or what goes into making them. A legal determination in WTO dispute settlement that two products are not “like” based on the amount of carbon used in making them would be unprecedented. In our view, the uniqueness of the existential global challenge of climate change fully justifies carving out some kind of a limited exception for distinctions between and among traded products on the basis of carbon use and carbon emissions. At the same time, we are mindful of the legitimate fear in the trade regime that doing so as part of a “likeness” determination could open the door to other distinctions that could threaten the overall trading system. We offer two options that seem to us to combine the most benefit for the climate at the least risk to trade.

*Fostering climate action through enabling the formation of climate clubs and coalitions.* In the absence of a universal and comprehensive approach to climate change we are anticipating the continued conclusion of various partial and limited climate-related agreements by clubs of some countries, and perhaps including in certain instances subnational and/or non-state political actors. Given the strong potential of such arrangements to complement multilateral action, it is, in our view, imperative that the trade and climate regimes be mutually supportive of plurilateral climate action, and able to respond positively to this development. We offer four options, mindful that this must be done with due consideration for the WTO core principle of non-discrimination, and that there may be potential for framing climate-related clubs as plurilateral agreements within the WTO and as part of free trade agreements permissible under the WTO treaty.

*Finding an agreed framework for emissions trading, carbon taxes, and border measures.* Among the fragmented responses to climate change post 2015, we can expect the proliferation of a range of policies to price carbon, including emissions trading, carbon taxes, and possibly border measures. Putting a price on carbon is essential to climate change mitigation. But doing so in a largely uncoordinated manner enormously complicates the options for preventing a collision between the trade and climate regimes. It does so especially with respect to the array of trade restrictive border measures, which could be implemented by countries for fear of carbon leakage and also as political concessions for the acquiescence of domestic producers to national restrictions on carbon emissions. We offer two options that respond to one of the main concerns in the climate-trade interface: that of unnecessarily restricting trade for climate reasons.

*Making use of subsidies, standards, government procurement, and intellectual property.* A key challenge in addressing climate change is to provide at a minimum a level playing field between clean and fossil energies. In addition to putting a price on carbon, it is essential to stop subsidizing it. We believe that the WTO has a role to play in this context, because fossil fuel subsidies are likely to affect competition and trade. Moreover, to address climate change, it will be necessary to stimulate the production and use of low-carbon products. Towards this end, a range of policy instruments are being used by policy-makers, including the use of subsidies, standards, intellectual property rules, and government procurement. In some cases, there is a lack of clarity on what is allowed and what is not, creating a zone of uncertainty that the six policy options offered in this category would seek to address.

*Fostering sectoral approaches, including maritime shipping and aviation.* In tackling climate change, where progress among smaller groups of stakeholders on a limited set of issues at a time is more easily within reach than a global, comprehensive deal, it is relevant to also revisit the concept of sectoral deals. Sectoral rules can be the building blocks towards global rules. For our final three policy options, we have considered two sectors with a clear trade link and with abatement opportunities at hand: international shipping and aviation.

## Next Steps

The trade regime and the climate regime are moving forward on many interrelated issues affecting the intersection of trade and climate change. None of the policy options for dealing with the nexus of trade and climate change will succeed if significant additional efforts are not made by both regimes to work as one on behalf of our overriding global goals for sustainable development. The intent in offering our set of policy options is to be thought-provoking. It is not to be definitive. We certainly do not anticipate that all of these options will be implemented. We hope to inspire considered deliberation by trade and climate negotiators and other decision-makers alike. We hope too that this considered deliberation will help inspire action.

# 1. Introduction

Trade rules and climate realities are rapidly approaching a crossroads. As the world rightly intensifies its search for global solutions for climate change, a vast number of climate-related concerns are already consuming climate negotiators. To this number must be added the relationship between international trade and climate change. Far too little attention has been paid in global policy-making to the nexus between climate change and trade. In particular, important opportunities for the trade system to contribute to addressing climate change have been largely overlooked. The E15 Expert Group on Measures to Address Climate Change and the Trade System, jointly convened by ICTSD and the World Economic Forum in partnership with Climate Strategies, has sought to bridge this gap.

Economically, environmentally, and in every other way, the linkage between trade and climate change in global governance is unavoidable and inescapable. Climate actions—which, in the current expectation, are to be nationally determined—will necessarily affect terms of trade. On the other hand, trade has a direct impact on emissions, positive and negative, through transport and also through the use of resources. Trade can also play an important role in mitigation as well as adaptation by fostering access to goods such as food, and also by speeding the spread of clean new technologies.

The two compelling matters of trade and climate change—both urgent global concerns—simply cannot be separated. One cannot be addressed without affecting the other, and, without doubt, we must address both. The world must find the best way to continue lowering barriers to international trade, so as to spur growth and development, while also combating climate change. We need the right global rules for both, and we need to think creatively about how to navigate within existing rules so as to make the most out of the policy space that is already there. The rules we choose to use to address one must be consistent with the rules we choose to use to address the other.

We see the need for additional efforts by global climate negotiators to acknowledge the existence of international trade rules. We see, equally and especially, the need for constructive dialogue on possible changes to some of those trade rules by the WTO. We also see a need for enhanced use of various committees and fora under the WTO, as well as the United Nations Framework Convention on Climate Change (UNFCCC) and other intergovernmental organizations, for promoting discussion and information exchange to further synergies and make the most out of opportunities, while at the same time addressing possible

areas of tension. Importantly, we see a need for the multilateral fora to foster action from the “bottom-up”—including through plurilateral efforts.

In our view, the key to identifying the improvements needed in trade rules can be found by keeping the promise made by the members of the WTO in the preamble to the Marrakesh Agreement that established the WTO. Originally, in 1947, the 23 countries that signed the General Agreement on Tariffs and Trade (GATT) professed their shared desire, in the preamble to the GATT, for “developing the full use of the resources of the world and expanding the production and exchange of goods.” In contrast, in 1994, the more than 100 countries that agreed to transform the GATT into the WTO through the conclusion of the Marrakesh Agreement expressed their shared desire for “the optimal use of the world’s resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of development.”

As we see it, this clear distinction between a desire for “full use” and “optimal use” of the world’s resources consistent with sustainable development is a distinction that makes a crucial difference for the WTO. The Appellate Body of the WTO seems to us to see this distinction in much the same way. In pointing to the presence of a commitment to “sustainable development” in the Marrakesh Agreement, the Appellate Body has observed that the signatories “to that Agreement were, in 1994, fully aware of the importance and legitimacy of environmental protection as a goal of national and international policy.”<sup>1</sup> There is all the more reason for the members of the WTO to be fully aware of this in 2016.

One essential way for the members of the WTO to help keep their promised commitment to sustainable development is by fully addressing the relationship between trade and climate change in all that they do going forward.

Similarly, while carrying out efforts to address climate change, parties to the UNFCCC should be held accountable to their commitment as expressed in Article 3.5 of the Convention, “... 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.”

<sup>1</sup> Appellate Body, United States – Shrimp, WT/DS58 (1998), para. 129 and footnote 107.

# 2. Background: Diverging Trade and Climate Regimes

## 2.1. Mutual Misunderstanding

Trade and climate policy-making communities exist side by side but rarely interact directly. Because of this, in part, they are two worlds with insufficient mutual understanding. Those who are devoted most to removing barriers to trade worldwide often do not put the fundamental legitimacy of climate and environmental concerns at the top of their priorities. Similarly, those who are devoted most to addressing climate change and to mitigating other environmental harms often give too little thought to the equally fundamental legitimacy of trade and other economic concerns, which constitute the basis for growth and sustainable development.

The two worlds of trade and climate have different goals, different regimes, and even a host of different acronyms and jargon that frustrate communication and that hinder reconciliation through a common undertaking. To cite only one of many examples, some of the trade advocates among us were surprised to learn in our deliberations that climate advocates speak of “border tax adjustments” generically, while some of the climate advocates among us were equally surprised to learn that, in trade, a “border tax adjustment” is a legal term of art referring to a specific provision in a specific trade treaty obligation. Thus, climate policy-makers may be considering using trade measures, or may fear that others do, without being fully aware of the legal framework regulating them. This is just one example of the mutual misunderstandings that exist between the climate and the trade worlds, which make progress on addressing the issues of “trade and climate change” all the more difficult.

This mutual misunderstanding must end. Not least, this must be done for the sake and in the service of the poorest in the world. The millions upon millions of people still mired in poverty are the most in need of the economic growth that freer trade can help produce, and they are also the most at risk from the devastations and dislocations of continued climate change. Jim Yong Kim, the president of the World Bank, has spoken often of “the intrinsic link between climate change and poverty,” and all empirical evidence supports him. Pope Francis has reminded us recently of “the intimate relationship between the poor and the fragility of the planet,” and of the fact that “both everyday experience and scientific research show that the gravest effects of all attacks on the environment are suffered by the poorest.” The poorest among us need both economic growth and help against the harmful effects of climate change.

And, in truth, so do we all. The world as a whole needs the right blending of economic growth, social inclusion, and environmental protection that can only come through a shared sustainable development. Neither the goals of the long-established global trade regime nor those of the newly-emerging global climate regime can be accomplished unless the two worlds of trade and climate endeavour can come together to work as one.

Our overriding message to trade negotiators and to climate negotiators alike about how best to meet the global challenge of reconciling our goals for trade and for climate change is that they must begin by acknowledging the inseparability of the two issues. Based on this mutual acknowledgment, they must each acknowledge, too, the essential legitimacy of the goals of the other, and they must begin now, belatedly, to communicate. This communication must aim at framing global rules on trade and on climate that are mutually consistent, mutually supportive, and mutually reinforcing.

## 2.2. Multilateral Rules and Trade Restrictions

If pressed as to what, above all else, we wish to emphasize to global decision-makers, we would start by telling them this: where climate change is concerned, international trade and all the other aspects of global market commerce cannot be ignored; and where international trade is concerned, global climate change is a unique issue that must be addressed uniquely. We would also tell them this: it is perhaps unavoidable that, in legitimately addressing climate change, the governments of the world will impose some restrictions on trade.

One issue of concern for the trade and the climate communities alike is that of trade restrictions for climate purposes (Derwent 2015). Given the unavoidability of at least some climate-related trade restrictions, the right question is not whether there should be any such restrictions. The right question is: which restrictions should there be? Crucial related questions are: how can we make certain that any such trade restrictions are truly being imposed for legitimate climate reasons pursuant to legitimate climate measures? And, also, how can we keep any legitimate trade restrictions imposed for climate reasons from morphing into a multitude of illegitimate trade restrictions imposed for a host of other reasons? How do we keep necessary climate efforts from undermining a global trading system more than half a century in the making?

The right restrictions will be those that address climate change uniquely as a common global concern that is altogether unprecedented and altogether unlike all other global concerns that might be cited as justification for imposing trade restrictions. There are, to be sure, many other pressing concerns in the world. In any number of ways, the global trade system must—and does—take them into account. But none of those other concerns justifies making changes in WTO rules that would risk an unravelling of decades of global accomplishment in building the WTO-based multilateral trading system. Nor can we risk undermining the ongoing efforts within that system to continue to reduce global poverty and increase global prosperity by lowering the remaining barriers to trade. Climate change is different. Climate change is unique. Climate change threatens the very fate of human civilization and of the planet.

In the absence, so far, of any structured communication between the climate and trade worlds, there is a prevailing air of mutual apprehension. Climate advocates fear that trade rules will keep us from fighting climate change. Trade advocates fear that making allowances for fighting climate change in trade rules will undermine trade and lead to an endless procession of other causes seeking such special allowances. There is also a prevailing mutual procrastination. Each of the climate and the trade worlds is waiting for the other to act first on the issues that concern them both.

In an effort to end this procrastination, and to help spur mutual climate and trade action, we have aired these fears ourselves at length in our own deliberations. In airing them we have been struck, one and all, and most of all, by how misplaced many of these fears really are. The climate advocates among us have come to see that trade rules already respect the environment, and that numerous trade rulings have evidenced this respect. Similarly, the trade advocates among us have seen that, far from minimizing trade and other market concerns, the climate advocates see those concerns as central to solving our climate dilemmas. From this illuminating exchange, we have concluded, each and all, that the right mix of climate rules and trade rules going forward can eliminate the fears of climate and trade advocates alike while also fulfilling our goals for climate and for trade.

### **2.3. Opportunities for the Trade System to Contribute to Climate Action**

In addition to eliminating fears and enhancing mutual understanding, we have scrutinized at length opportunities for the trade system to contribute to climate action, and also for the trade system to inform climate action. We have observed, for example, that there is an increased tendency for climate action and policies between groups of countries that are more ambitious, for various reasons, to design and implement at a national, regional, or plurilateral level, or even between non-state actors and nation states. We believe that it is crucial that the trade and the climate systems respectively be supportive of these developments, in the interest of enhanced action. Indeed, although many of us consider multilateral action as the preferred way forward,

all of us share an increasing understanding that plurilateral action may be a powerful complement to multilateral action, and, if constructed carefully, can pave the way for progress in the multilateral settings.

Our Group has explored the case for such climate clubs, and has discussed how they relate to trade (Victor 2015; Leycegui and Imanol 2015; and, Petsonk and Keohane 2015). We see several possible roles for trade to play in this context—for instance in promoting necessary climate technology transfer between club members. Whereas the trade rules may not pose direct obstacles to the success of climate clubs, those rules could be further clarified to remove uncertainty and even to make explicit reference to climate change. In addition, in the specific case of climate action, a few actors moving ahead with more ambitious action is associated with risks of both “free riding” and of apprehensions of distortions to competitiveness and of carbon leakage, at a scale that depends on multiple factors. For this reason, allowing the use of some trade-restrictive climate measures may be perceived as a key element for mitigating those risks, and may thus make a significant practical difference to the successful emergence and establishment of clubs.

One concern for trade as well as for climate constituencies is the carbon embedded in trade. Indeed, the embedded carbon in trade has increased significantly in recent decades. This has occurred mostly as a consequence of industrialization, specialization, and the globalization of value chains, and not because of carbon leakage. This said, the uniqueness of the challenge posed by climate change argues for scope for policy-makers to consider options for allowing trade in goods and services with relatively low carbon content to be treated more favourably, so as to help stimulate the shift to a low carbon economy (Cottier 2015). Although encouraging this shift may be one of the most important contributions the trade system could make to climate action, finding the best way to do so is also one of the most challenging issues on which the climate and trade worlds must find common ground. Not surprisingly, this has indeed proven to be a difficult challenge for our Group. The issue of “likeness” is one of the founding and fundamental principles of the WTO framework. It is the legal glue holding together the two basic principles of non-discrimination between and among traded products—the “national treatment principle” and the “most-favoured-nation principle.” Any deviations from the traditional legal notions of “likeness” between and among traded products must be carefully weighed, so as to be effective in addressing climate change, and equally effective in preserving the trading system for now and for the future.

Thus, we wish to emphasize the unique opportunity presented for cooperation between the WTO and the UNFCCC on trade and climate change. And, with hopeful anticipation of such cooperation, we wish also to stress—specifically for purposes of the WTO trading system—the utter uniqueness of climate change. To keep from opening a Pandora’s box of global protectionism, the unique issue of global climate change must be addressed by the members of the WTO in ways that are likewise unique.

## 2.4. An Elusive Universal and Comprehensive Climate Treaty

For all of the long-held hopes of so many in the world, the chances of concluding a universal and comprehensive climate treaty which will effectively resolve the problem of climate change seem, to us, remote. At the same time, it seems unlikely to us that nothing at all will be concluded. At the time of writing, considerable progress has been made towards a positive outcome at the UN climate change conference in Paris that could point the way towards more positive outcomes beyond. There are considerable political pressures worldwide to reach an arrangement. For this reason, we are hopeful of the conclusion of a meaningful international agreement that, over time, will help humanity to avoid worldwide temperature increases that exceed 2 degrees Celsius (3.6 degrees Fahrenheit).

The broad outlines began to emerge in Lima of an “agreement” in Paris that would be universal but that would also be decidedly limited. For reasons perfectly understandable within the challenging context of the climate negotiations, it is no longer anticipated that a future climate agreement will include general obligations for national cuts in greenhouse gas emissions. Instead of binding commitments on cutting carbon emissions, the envisaged agreement would include only voluntary “[intended] nationally determined contributions.”<sup>2</sup> Conceivably, every country would agree to make some such a voluntary national “contribution”—a vital advance from the Kyoto Protocol where only a list of developed countries committed to emission reductions.

Significantly, however, it is not envisaged at this time that there will be any commonly agreed nomenclature in the Paris Agreement for either defining or harmonizing these voluntary national “contributions.” Furthermore, it is at the moment unclear whether parties to the UNFCCC will be able to agree on clear metrics that could be used to make comparison between these “contributions.” Additionally, it is not expected now that there will be any real disciplines in the Paris Agreement relating to the making or the meeting of these commitments on “contributions.” Not least, and importantly, there will most likely not be any effective mechanism in the climate agreement for settling disputes about these “contributions.” The current draft of the proposed climate agreement (October 2015) simply incorporates by reference the dispute settlement provisions in the UNFCCC—which are optional, and have never been used.<sup>3</sup>

Moreover, what may be most important for purposes of international trade law is that, to date, there has been virtually no discussion by either climate negotiators or delegates to the WTO of the specific kinds of national measures that could be seen as “climate measures” taken to fulfil these voluntary “contributions,” or of how those

national measures could be reconciled with WTO law if they restricted or otherwise affected trade in goods or services and, thus, fell within the scope of the WTO treaty. Therefore, as of now, it can be anticipated that post 2020 there will be no reliable way of discerning from the Paris Agreement whether a national “measure” supposedly taken in furtherance of a “contribution” promised in fulfilment of that agreement would be a “climate measure” or not. And, it can thus already be anticipated that there will, in the aftermath of the conclusion of the Paris Agreement, be no agreed way of judging whether such a national “measure” should be exempt or not from what would otherwise be WTO trade obligations. This omission from the climate debate is critical, and it affects in a variety of ways many of the options presented in the next section of the paper.

## 2.5. Dealing Uniquely with Climate Change in the Global Trade System

In framing our offered policy options for dealing uniquely with the issue of climate change within the global trade system, we are mindful that there are many different concerns relating to the climate, and also that there are many different alternative means for addressing the same concerns through trade. There can be new rules. There can be revised rules. There can be “decisions” and “interpretations” and “waivers.” There can be trade reviews and committee actions. There can also be WTO dispute settlement. And there can be ways for decision-makers to work within the existing trade rules. In a number of instances, we offer one particular approach as a policy option. In others, we offer several possible approaches for consideration by global decision-makers.

Each of the policy options that follow garnered broad support within the Expert Group. However, it is safe to say that none of us agrees on all of them. We have not sought to achieve a consensus on our list of policy options. We have instead chosen to identify and to offer as broad a selection of options as possible for due consideration by all of those entrusted with decision-making on the interrelationships between trade and climate change.

Our focus in all of the policy options is on the interface between national and international measures taken to address climate change and the global rules of the WTO-based multilateral trading system. Our focus is *not* on all else that could and should be done by the WTO to keep its promise to promote “sustainable development.” Moreover, it is *not* on how best to structure a global climate treaty—although, clearly, that considerable challenge is unavoidably related to the interface between climate and trade, and therefore we do include some options for climate decision-makers.

<sup>2</sup> Once an agreement reached, however, these contributions would no longer be referred to as “intended” but simply as nationally determined contributions.

<sup>3</sup> Article 21 in the draft agreement text dated 5 October 2015, referring to Article 14, UNFCCC.

Our intent in offering this list of policy options is to be thought-provoking. It is not to be definitive. We see the list of policy options that follows as, more than anything else, a long “checklist” of possibilities for decision-makers to consider. We certainly do not anticipate that all of these policy options will be implemented. As we explain, some are offered in the alternative. We hope to inspire considered deliberation by trade and climate negotiators and other decision-makers alike. We hope too that this considered deliberation will help inspire action.

The options are arranged in subcategories. However, there are overlaps. For instance, options for addressing embedded carbon would be useful for elaborating rules for carbon taxes and border measures. Similarly, options in the area of “clubs” are relevant for sectoral approaches. There is no hierarchy of the offered options, and no suggested sequencing. Having said that, some options are, of course, clearly more within reach over a short to medium time horizon than others.

Our very strong view is that global climate rules and global trade rules must be consistent in both conception and in application. They must likewise be consistent in enforcement. Where proposed climate rules are concerned, our main focus in what follows is on possible approaches that may have trade implications or that may otherwise be affected by the rules or rulings of the WTO. Where current or proposed trade rules are concerned, our focus in these policy options is equally on the many affirmative ways that trade and trade rules can be used to advance climate actions, and on suggesting ways to avoid the potential collisions that may occur with the current trade regime when taking climate actions.

# 3. Policy Options for Mutually Supportive Regimes

## 3.1. Maximize Trade Solutions to Climate Change and Minimize Regime Conflicts

Trade offers opportunities as well as constraints in the common struggle against climate change. Most of these opportunities are currently being missed, and it is, as we see it, vital that they be seized. The effort to address climate change must occur not only within the UNFCCC; it must also occur within the global trade system. Trade can be green, and world trade rules can be transformed into better tools for making it so.

In some ways, this is already happening—such as in the current negotiations on eliminating duties on environmental goods, and in regional trade agreements that include provisions on climate change. In other ways, trade initiatives aimed at addressing climate concerns have yet to unfold. Although WTO rules do acknowledge and respect environmental concerns, there are numerous additional ways in which the trade regime can contribute to the achievement of climate goals. Several such options can be found throughout this paper. Through the WTO as well as bilateral and regional trade agreements, trade rules can be used also to help minimize carbon emissions along global supply chains, help shrink fossil fuel subsidies, help promote the development of renewable energy, and much more. Other expert groups in the E15Initiative have suggested numerous such positive innovations for the trade system. Because they have done so, we do not repeat many of those affirmative policy options here. But we do stress that they must not be overlooked.

At the same time, it is, in our view, necessary to anticipate potential conflicts and to prevent legal collisions between WTO rules and national and international measures taken to address climate change. Such possible collisions will differ depending on which climate scenarios unfold in the near future.

The options below deal with what can be anticipated as a legal overlap between the existing WTO-based trade regime and the various combinations of newly constructed climate regimes that may emerge. Under most of the likely climate scenarios, there will be an irresistible temptation to impose trade restrictions and trade sanctions as ways of ensuring the enactment and the enforcement of national climate measures. Climate measures, moreover, can be expected also to affect trade in many other ways, and, by so doing, fall within the scope of the WTO treaty. For this reason, whatever scenario may prevail in the unfolding climate negotiations, drawing a legal line upfront between the trade-affecting climate measures that are permissible and those

that are not is imperative. This is true for the global climate negotiations; it is also true for any negotiations that may result in the formation of “climate clubs.”

Ideally, this legal line should be drawn in concert through coordinated legal actions by the parties of the UNFCCC and by the members of the WTO. In the alternative, the line could be drawn in a legal action taken by either one in consultation with the other. An action by the UNFCCC rather than by the WTO would then be preferred. Nearly all of the members of the WTO are parties to the UNFCCC; whereas an action by the WTO would bind only a smaller group of countries. Non-WTO countries would remain free to take any trade-affecting climate measures they wished (just as WTO members remain free to impose any trade discrimination on them that they wish). In contrast, an action by the Conference of the Parties (COP) would politically, if not legally, bind all UNFCCC parties, including nearly all of the members of the WTO. Ideally, such a COP action could then be echoed and endorsed in a separate and simultaneous action by the WTO—although, even in the absence of a specific WTO action of endorsement, it is highly likely that such a COP action would be given due respect as part of public international law in any subsequent WTO dispute settlement.

Unfortunately, as it is, too little thought has been given to the questions of when, where, and how to draw this needed legal line either in UN climate negotiations or in ongoing WTO trade negotiations. To the extent that those involved have considered these questions at all, they have evidently assumed that these questions will be addressed in due course as part of the inter-organizational and procedural “end game” whenever the COP finally approaches the hoped-for conclusion of a universal and comprehensive climate treaty. The COP climate negotiators seem to assume that, at that time, the WTO will endorse the new climate rules agreed by the COP; the trade negotiators seem to assume that, at that time, the COP will reaffirm in the Paris Agreement the long-standing international commitment to the established trade rules of the WTO.

As a consequence, endless legal questions—most of them left largely unanswered during more than half a century thus far of GATT/WTO jurisprudence—will be likely to arise under international trade law. There is something considerably less than a lack of clarity in international trade law about whether some of the climate measures contemplated by some of the parties to the UNFCCC would be permissible current WTO rules or not. If neither climate negotiators nor trade negotiators draw a legal line or provide guidance regarding what is a legitimate and lawful climate measure affecting

trade and what is not, then that line will have to be drawn on a case-by-case basis as individual disputes arise; and, in the absence of any mandatory climate dispute settlement mechanism, that line will be drawn by WTO jurists in WTO dispute settlement. In other words, a decision by UN climate negotiators *not* to include a mandatory climate dispute settlement mechanism in the Paris Agreement is *not* a decision to forego dispute settlement over climate disputes that affect trade. Rather, it is a decision *de facto* to leave the settlement of trade-related climate disputes to the WTO. Furthermore, the absence of any agreed definition of what constitutes a “climate measure” in the Paris climate agreement would be a decision *de facto* to leave the clarification of the meaning of “climate measure” to WTO jurists on a case-by-case basis.

Entrusting WTO jurists with such disputes is not necessarily the wrong result. In a series of landmark rulings during the first two decades of WTO dispute settlement, WTO jurists have demonstrated, time and again, that they will not automatically permit trade to trump environmental concerns. Yet this is not a jurisdictional result that should happen inadvertently. Nor is it one that should occur without considerable shared discussion among climate and trade negotiators alike. Moreover, if there is to be no mandatory climate dispute settlement mechanism, and if WTO jurists will therefore be expected to judge these disputes, it would be best, by far, if they were given more and better guidance by those negotiating both on the climate and on trade. At a bare minimum, each of the climate and trade regimes should acknowledge legally the legitimacy of the other. This can best be done in the treaty texts that govern those regimes.

In view of the above, and in order to maximize the ways trade can address climate change while minimizing conflicts between the trade and climate regimes, we offer the following options.

#### Policy Option 1

Enhance the mutual understanding between the trade and climate regimes through recognizing the legitimacy of each regime and through a greater use of existing fora, such as the Committee on Trade and Environment and the Trade Policy Review Mechanism of the WTO as well as the Subsidiary on Body Scientific and Technological Advice of the UNFCCC, for assessing the implications of one regime for the other.

#### Policy Option 2

Strengthen the WTO Trade Policy Review Mechanism to include a required assessment of the impact of relevant domestic measures on climate change, and also on efforts to address climate change.

#### Policy Option 3

Continue to explore the role for a formal and mandatory climate dispute settlement mechanism in the UNFCCC and in other international climate agreements.

#### Policy Option 4

In the UNFCCC, include an agreed means for measuring, reporting, and verifying measures taken to implement Intended Nationally Determined Contributions (INDCs) as well as a definition that can be used for purposes of identifying “climate measures” in trade and other dispute settlement.

#### Policy Option 5

Have the WTO agree that it will be bound for purposes of WTO dispute settlement by the judgments in any climate dispute settlement mechanism relating to climate compliance under those agreements. Provide that:

- a) A national measure taken by WTO members which is found to be in furtherance of a national climate “contribution” in a climate agreement will be respected in WTO dispute settlement, and that such a measure will be exempt from what would otherwise be that WTO member’s WTO obligations;
- b) Trade sanctions taken by one WTO member against goods or services of another WTO member pursuant to the terms of a climate agreement to which both those WTO members are parties will be considered to be in compliance with WTO obligations.

#### Policy Option 6

Through a decision or some other legal action by the members of the WTO, create a legal breathing space by establishing a “peace clause” for climate action. Such a “peace clause” could require WTO members to wait at least three years before challenging national climate measures or countermeasures that restrict trade or otherwise have trade effects in WTO dispute settlement.

#### Policy Option 7

Through a common action by the UNFCCC and the WTO, clarify the differences, if any, between the concept of “common but differentiated treatment” in the climate regime and the concept of “special and differential treatment” in the trade regime, and, further, clarify the ways and the extent to which these forms of treatment should be acknowledged in dispute settlement involving trade-related climate measures.

### 3.1. Recognize Embedded Carbon in Trade and Revisit the Concept of “Like” Products

Trade obligations are generally obligations relating to the traded products themselves, and not to the particular traders or to the individual countries that are part of the trade system. The most basic trade obligations therefore relate to how the products themselves are treated in international trade. The most-favoured-nation obligation is an obligation not to discriminate between and among products from different foreign countries. The “national treatment” obligation is an obligation not to discriminate in favour of domestic products over the products from a foreign country. At the most basic level, these elementary obligations in the trading system can work only if we have some way of identifying which particular traded products are to be compared when determining whether these obligations are being respected. For this reason, trade rules have long stated that the comparison must be between “like

products.” Thus, the concept of “likeness” of products is part of the very foundation of the trade system.

What is, or is not, a “like product” has been the subject of endless jurisprudence in the trade system. In trade jurisprudence, the determination of whether products are “like” or not has been made on the basis of four criteria of “likeness”: (1) the properties, nature, and quality of the products; (2) the end-uses of the products; (3) consumers’ tastes and habits in respect of the products; and (4) the tariff classification of the products. The determination of “likeness” has not been made on the basis of how products are made or on the basis of what goes into making them.

Under this jurisprudence, a distinction made between products on the basis of the amount of carbon that is used in making them is not justified. A legal determination in WTO dispute settlement that two products are not “like” based on the amount of carbon used in making them would be unprecedented. Conceivably, such a ruling could open the door to all kinds of other “likeness” distinctions based on other “processes and production methods” (commonly called PPMs). If a distinction on the “likeness” of products for purposes of determining whether there has been a violation of a WTO obligation can be made on the basis of the amount of carbon that is used in making them, then what other distinctions on what other bases can be made relating to PPMs? Where do we draw the line?

In our view, the uniqueness of the existential global challenge of climate change fully justifies carving out some kind of a limited exception for distinctions between and among traded products on the basis of carbon use and carbon emissions. At the same time, we are mindful of the perfectly legitimate fear in the trade regime that doing so as part of a “likeness” determination could open the door to other distinctions that could threaten the overall trading system. We have considered—at length—numerous possible alternatives. We have settled on two options that seem to us to combine the most benefit for the climate at the least risk to trade. To thread this legal and political needle, we offer an approach consisting of two linked policy options.

#### Policy Option 8

Initiate a joint effort by the WTO, the UNFCCC, and other relevant international institutions to establish an agreed common international standard for calculating the amount of carbon used in the making of traded products;

and,

#### Policy Option 9

Agree on a “waiver” from WTO obligations for all trade restrictive “climate measures” that are based on the amount of carbon used in making a product and that are taken in furtherance of and in compliance with a UNFCCC climate agreement or with a plurilateral “climate club.”

This approach is not without precedent. In rare instances—such as with conflict diamonds—waivers have been granted for limited purposes and in unique circumstances by the WTO for what would otherwise be actions inconsistent with WTO obligations. Climate change is suitably unique. However, here we emphasize two things: first, the importance of a carefully drawn “waiver” that will clearly define the limits of such permitted measures; and second, the imperative that the climate regime itself defines what precisely is a “climate measure.” Otherwise, jurists for the trade regime will do so in the context of discrete disputes in WTO dispute settlement.

Such a waiver would open up a series of opportunities for the trade system to support climate action. For example, this would make it possible for the members of the WTO to clarify, through a decision, that, in the definition of a “technical regulation” in the WTO Agreement on Technical Barriers to Trade (TBT), the word “related” modifying “processes and production methods” includes the energy used or the carbon emitted in making a product.<sup>4</sup> This would legally justify legitimate climate-related actions that take the form of technical regulations. Similarly, this approach would make it possible to amend WTO rules to provide that the amount of carbon used in making imported products from a WTO member can be calculated and included when applying countervailing duties to subsidies or anti-dumping duties to those products.<sup>5</sup> In addition, it would be possible to give consideration to linking the permissible use of tariff concessions involving process and production methods relating to embedded carbon in a specific product. (See further section 3.4 below.)

The granting of such a waiver may be an option not easily within reach. There are the concerns of the trade regime we have already described, and there is also the perception of a North/South divide on the issue of embedded carbon. This relates to the fact that while a number of developed countries have already managed, to some extent, to reduce their production-based emissions, they have not yet reduced their carbon consumption. Much of the world’s emission-intensive production is increasingly being imported from developing or emerging economies. Thus, the burden of the waiver we have offered for consideration would fall more heavily on developing countries if not accompanied by other actions to help assure them of equal competitive opportunities in the global marketplace. Such actions should include, but not be limited to: the enhanced transfer of low-carbon technologies to developing countries, and the provision to developing countries of adequate financing for climate mitigation and climate adaptation (Cottier 2015).

<sup>4</sup> See Annex 1 to the TBT Agreement.

<sup>5</sup> See the Agreement on Subsidies and Countervailing Measures and the Anti-Dumping Agreement

### 3.3. Foster Climate Action Through Enabling the Formation of Climate Clubs and Coalitions

As previously indicated, in the absence of a universal and comprehensive approach to climate change we are anticipating the continued conclusion of various partial and limited climate-related agreements by “clubs” of some (but not all) UN member countries, and perhaps including in certain instances subnational and/or non-state political actors. Given the strong potential of such arrangements to complement multilateral action, it is imperative that the trade and climate regimes be mutually supportive of plurilateral climate action, as well as action undertaken by non-state actors or by cities, municipalities, and sub-regions, and be able to respond positively to this development. This said, we are mindful that this must be done with due consideration for the core principles of non-discrimination of the WTO. We are mindful too that there may be potential for framing climate-related “clubs” as plurilateral agreements within the WTO and as part of free trade agreements permissible under the WTO treaty. Moreover, they could be part of regional trade arrangements made outside the WTO.

Relevant in this context is an open question in WTO jurisprudence: can climate and other environmental measures applied by a WTO member be entitled to the general exceptions for what would otherwise be WTO trade obligations for trade in goods under Article XX of the GATT and, for trade in services, Article XIV of the General Agreement on Trade in Services (GATS), only if they address environmental harms within the territorial jurisdiction of that WTO member? Or can those measures also be entitled to those general exceptions if they address environmental harm that occurs elsewhere—such as carbon emissions in the territorial jurisdiction of another WTO member?

We offer the following options on climate clubs and coalitions.

#### Policy Option 10

Members of the WTO should affirm by a decision that climate measures taken pursuant to a climate agreement of the UNFCCC are measures falling within the scope of Article XX of the GATT and of Article XIV of the GATS, and will be entitled to the benefit of those general exceptions to the obligations in the WTO treaty, provided they comply in their application with the conditions to those exceptions reiterated in Article 3.5 of the UNFCCC.

#### Policy Option 11

Members of the WTO should agree on a set of circumstances in which there would be a presumption in favour of granting a waiver for a climate-related “club” organized outside the framework of the WTO to become a “plurilateral” agreement under the WTO treaty. Members of the plurilateral could commit to a set of rules on climate change that would be binding solely on them and would be fully enforceable in WTO dispute settlement.

#### Policy Option 12

Through a decision by the members of the WTO:

- a) Affirm that an agreement by a climate “club” to provide “WTO-plus” trade benefits over and above those due under the WTO treaty to WTO members that are members of that “club,” and not to those WTO members that are not “club” members, is permissible under WTO rules;
- b) Provide that trade sanctions taken by a WTO member pursuant to a plurilateral “climate club” or some other plurilateral climate agreement to which that WTO is a party against another WTO member that is not a party to that plurilateral climate agreement will be in compliance with WTO obligations, only to the extent that the requirements of the GATT, the GATS, and other relevant WTO agreements are fulfilled.

#### Policy Option 13

Through a decision by the members of the WTO, provide that:

- a) There is no territorial limitation to Article XX of the GATT, and that therefore WTO members have the legal right to take measures domestically to address environmental harms that occur outside their national territory;
- b) Or, provide, more narrowly, only that there is no territorial limitation to Article XX of the GATT and Article XIV of the GATS for measures taken for climate reasons relating to the amount of carbon used in making traded products.

We note that Article 7.2(c) of the UNFCCC stipulates that the COP shall “facilitate, at the request of two or more Parties, the coordination of measures adopted by them to address climate change and its effects (...).” This is a rather far-reaching provision in that it requires concrete action from the COP to “facilitate” in addition to creating simply legal space for plurilateral action. Moreover, the request by two or more parties to which this provision refers would have to be made to the COP through inclusion of the item on the agenda of a COP, and the COP would then need to actively consider the request (Amerasinghe 2010, 22). We have not discussed the implications of this in depth, but we believe this possible approach is worthy of serious consideration in seeking added flexibility for furthering climate action.

### 3.4. An Agreed Framework for Emissions Trading, Carbon Taxes, Border Measures

Among the fragmented responses to climate change post 2015, we can expect the proliferation of a range of policies to price carbon, including emissions trading, carbon taxes, and possibly trade restrictive border measures. These policies all have relevance for international trade because they affect the relative prices of products based on their respective carbon emissions. In addition, many of them relate to the emergence of climate-related clubs and plurilateral actions, such as in the linking of emissions trading schemes.

Putting a price on carbon is essential to climate change mitigation. But doing so in a largely uncoordinated manner enormously complicates the policy options for preventing

a collision between the trade and climate regimes. It does so especially with respect to the array of trade restrictive “border measures,” which could well be implemented by countries for what will be professed to be climate reasons. Fearful of “carbon leakage” resulting from domestic policies, and of being put at a competitive disadvantage with foreign producers, domestic producers may well demand “carbon tariffs,” “border tax adjustments,” “free allowances,” and other primarily political concessions as the price for their acquiescence to national restrictions on carbon emissions. Such fears may be overstated. Empirical evidence to date suggests that there is less “carbon leakage” than many believe. However, politics being what it is everywhere in the world, many concessions to local political considerations in the form of “border measures” are likely to be made—if only to be assured of securing the votes needed for climate actions.

Against this background, instead of simply counting on an accommodating reading of Article XX as it stands in eventual WTO dispute settlement, the trade system could do more to assure such an outcome. This could be done by clarifying that the relevant provisions of Article XX apply to protection of the world’s climate, for example by an interpretative understanding (Porges and Brewer 2013). Indeed, one of the main concerns in the climate-trade interface is that of unnecessarily restricting trade for climate reasons—a debate that is ongoing in the UNFCCC as well as in the WTO and other trade settings.<sup>6</sup> To this end, we offer the following options.

#### Policy Option 14

Through a decision by the members of the WTO, clarify the relationship between international emissions trading schemes and the WTO so as to:

- a) Ensure that WTO rules explicitly apply to international emissions trading;
- b) Permit importing countries to require importers to purchase emission reduction units under that country’s emissions trading scheme as a condition of importing;
- c) Affirm that grants of exemptions and “free allowances” in emissions trading schemes are actionable subsidies under WTO rules. This could be combined with a time-limited peace clause allowing for a phase-out of existing free allowances so as to avoid challenges in the Dispute Settlement Body.

#### Policy Option 15

Through a decision by the members of the WTO, provide that a carbon tax or any similar tax based on the amount of carbon used in making a product is an indirect tax on a product that is therefore eligible for a “border tax adjustment” under Article II:2(a) of the GATT, either through a charge on an imported product or through a remission on an exported product, and, consequently, is not a violation of the prohibition against excessive taxation of imported products in Article III:2 of the GATT.

### 3.5. Make Use of Subsidies, Standards, Government Procurement, Intellectual Property

A key challenge in addressing climate change is to provide at a minimum a level playing field between clean and fossil energies. Importantly, as we have said, this includes pricing carbon. In addition to putting a price on carbon, it is essential to stop subsidizing it. This should be done by phasing out fossil fuel subsidies. We believe that the WTO has a role to play in this context, because fossil fuel subsidies are likely to affect competition and trade.

Moreover, to address climate change, it will be necessary to stimulate the production and use of low-carbon products. Towards this end, a range of policy instruments are being used by policy-makers, including the use of subsidies, standards, intellectual property rules, and government procurement. In some cases, there is a lack of clarity on what is allowed and what is not, creating a zone of uncertainty that must be addressed. Many options in this category are covered by other E15 groups, in particular the Expert Group on clean energy technologies and the Task Force on subsidies. Below we have chosen to highlight a few climate-specific options for consideration.

#### Policy Option 16

Mandate full disclosure of fossil fuel subsidies under WTO rules, affirm that fossil fuel subsidies are actionable subsidies under those rules, and agree on the gradual phase-out and ultimate prohibition of such subsidies.

#### Policy Option 17

Specify that Article XX of the GATT applies to the Agreement on Subsidies and Countervailing Measures (ASCM), so that subsidies intended to support climate action may deviate from the general obligations.

#### Policy Option 18

Ban “Buy National” government procurement and permit only non-discriminatory purchases of climate-friendly environmental goods and services under the WTO Government Procurement Agreement while encouraging more WTO members to accede to that Agreement. (See the Government Procurement Agreement—GPA.)

#### Policy Option 19

Enhance the clarity of current WTO rules on the permissibility of non-discriminatory environmental standards and technical regulations by encouraging high standards and regulations while barring both *de jure* and *de facto* discrimination. (See Article I and Article III of the GATT and Articles 2.1 and 2.2 of the TBT Agreement.)

#### Policy Option 20

Encourage the conclusion of mutual recognition and harmonization of environmental standards through use and enhancement of existing WTO rules, especially through the further development of international standards. (See Articles 2.6 and 2.7 of the TBT Agreement.)

<sup>6</sup> The recent experience of the European Union attempting to impose unilaterally a carbon cost on international aviation clearly demonstrated how controversial this issue remains worldwide.

#### Policy Option 21

Speed the spread of new green technologies by improving the provisions in WTO intellectual property rules on “green” technology transfer to least-developed and other developing countries. A new WTO working party should be appointed to explore and recommend ways of striking an appropriate balance to meet the needs for both access and innovation. (See Article 66.2 of the Agreement on Trade-Related Aspects of Intellectual Property Rights—TRIPS.)

### 3.6. Foster Sectoral Approaches, Including Maritime Shipping and Aviation

In addressing climate change, where progress among smaller groups of stakeholders on a limited set of issues at a time is more easily within reach than a global, comprehensive deal, it is relevant to also revisit the concept of sectoral deals. Sectoral rules can be the building blocks towards global rules. One of the sectors we have considered is international shipping—a sector with a very clear trade link, and with reasonable abatement opportunities at hand. International maritime shipping produces about 3% of global greenhouse gas emissions. With such emissions expected to double by 2050, the importance of finding a targeted solution is clear. Some progress has already been made by the International Maritime Organization (IMO) towards improving fuel efficiency in international maritime shipping. We offer the following sectoral options.

#### Policy Option 22

Through a decision of the members of the WTO, affirm that climate agreements affecting trade made by certain international organizations such as the IMO and the International Civil Aviation Organization (ICAO) will be upheld in WTO dispute settlement as to WTO members that are parties to those agreements, but not to those WTO members that are not.

#### Policy Option 23

The IMO should set a global target for carbon dioxide emissions in international maritime shipping.

#### Policy Option 24

The IMO or a group of Arctic countries should reach an agreement on addressing black carbon and methane emissions in the Arctic region in particular, by adopting and enforcing performance standards for ships operating in the region.

International aviation accounts for about 2–3% of all global greenhouse gas emissions, and its global warming impact is perhaps twice that amount if water vapour contrails and cirrus cloud effects are included. Carbon emissions from aviation doubled between 1990 and 2010, and could quintuple by 2050. As mentioned, an attempt by the European Union to enhance mitigation in the sector targeted the inclusion of aviation in the Emissions Trading System. However, the international application of the measures was suspended by the EU while awaiting results from ICAO’s consideration of the issues.

Therefore, we suggest that the COP should call for the ICAO to address issues of climate change more urgently than it has done to date. Furthermore, if significant progress is not made by the ICAO to address climate change issues, then the next COP should request the United Nations General Assembly to consider reform and restructuring of the ICAO to ensure that climate change issues are sufficiently addressed.

# 4. Next Steps

The Nairobi trade conference (MC10) and the Paris climate conference (COP21) mark important steps, but many more steps must be taken. The trade regime and the climate regime are moving forward on any number of interrelated issues affecting the intersection of trade and climate change. Above all, we urge all of those who have invested so much effort into the separate successes of COP21 and MC10 simply to communicate. They must come together now, and they must work together now, to explore mutual solutions to prevent a collision between the two regimes, and, further, to foster and facilitate an ongoing cooperation and collaboration between the two regimes. We have offered a number of options we believe worthy of their consideration. Others will offer more. None of the options for dealing with the nexus of trade and climate change will succeed if significant additional efforts are not made by both regimes to work as one on behalf of our overriding global goals for sustainable development.

# References and E15 Papers

Amerasinghe, Niranjali M. 2010. "Exceptionalism United? Unpacking UNFCCC Article 7.2.c." *Sustainable Development Law and Policy* Spring 10(2): 17–23, 58–59.

Porges, Amelia, and Thomas L. Brewer. 2013. *Climate Change and a Renewable Energy Scale-up: Responding to Challenges posed to the WTO*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

## Think Pieces

### **E15 Expert Group on Measures to Address Climate Change and the Trade System**

Cottier, Thomas. 2015. *Renewable Energy and Process and Production Methods*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Derwent, Henry. 2015. *What Has Climate to Fear from Trade?* E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Leycegui, Beatriz, and Imanol Ramírez. 2015. *Addressing Climate Change: A WTO Exception to Incorporate Climate Clubs*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Petsonk, Annie, and Nathaniel Keohane. 2015. *Creating a Club of Carbon Markets: Implications of the Trade System*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

Victor, David G. 2015. *The Case for Climate Clubs*. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.

The papers commissioned for the E15 Expert Group on Measures to Address Climate Change and the Trade System can be accessed at <http://e15initiative.org/publications/>.

# Annex 1: Summary Table of Main Policy Options

Policy Option	Current Status and Gap
<b>Maximize the ways trade can address climate change while minimizing conflicts between the trade and climate regimes</b>	
<p>1. Enhance the mutual understanding between the trade and climate regimes through recognizing the legitimacy of each regime and through a greater use of existing fora, such as the Committee on Trade and Environment and the Trade Policy Review Mechanism of the WTO as well as the Subsidiary Body on Scientific and Technological Advice of the UNFCCC, for assessing implications of one regime for the other.</p>	<p><i>Ad hoc</i> discussions have been held in the WTO Committee on Trade and Environment (CTE) on climate-related topics. Some trade-relevant discussions have also been carried out under the UNFCCC response measures forum-SBSTA/SBI. A decision on the continuation of the response measures forum is pending. A more systematic approach is needed.</p>
<p>2. Strengthen the WTO Trade Policy Review Mechanism to include a required assessment of the impact of relevant domestic measures on climate change, and also on efforts to address climate change.</p>	<p>No steps taken. At the 2009 Copenhagen Climate Summit, US President Obama proposed that the WTO Trade Policy Review Mechanism be replicated in a climate governance context, but no concrete steps pursuant to this have been taken within the UNFCCC.</p>
<p>3. Continue to explore the role for a formal and mandatory climate dispute settlement mechanism in the UNFCCC and in other international climate agreements.</p>	<p>A non-paper by Bolivia on a climate tribunal had been submitted in the context of the UNFCCC Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP). The latest draft text of the Draft agreement and draft decision on workstreams 1 and 2 of the ADP (10 November 2015) includes under Article 11 (Facilitating Implementation and Compliance) an option for the establishment of:</p> <p>An International Tribunal of Climate Justice to address cases of non-compliance with the commitments of developed country Parties on mitigation, adaptation, provision of finance, technology development and transfer, capacity-building, and transparency of action and support, including through the development of an indicative list of consequences, taking into account the cause, type, degree, and frequency of non-compliance.</p> <p>Bracketed text in the Draft Agreement (Article 104) also requests the [IPC][ADP][COP][SBI] to develop the [additional] modalities and procedures for the [effective operation of the Committee] [process] [mechanism] [International Climate Justice Tribunal] [, including the Committee,] referred to in Article 11 of the Agreement, with a view to completing its work on this matter for consideration and adoption by the CMA at its first session.</p> <p>The scope of the text is limited to developed countries and will await an outcome at COP21 in Paris.</p>
<p>4. In the UNFCCC, include an agreed means for measuring, reporting, and verifying measures taken to implement Intended Nationally Determined Contributions (INDCs) that can be used for purposes of identifying “climate measures” in trade and other dispute settlement.</p>	<p>The latest draft text of the Draft agreement and draft decision on workstreams 1 and 2 of the ADP (10 November 2015) provides for a number of options for a review, monitoring and verification. So far the nature, impact, regularity, and other details of the review process remain to be decided at COP21 in Paris. “Climate Measures” are not specifically defined but the draft text provides that further definitions may be required at a later stage in the negotiation process.</p>

Policy Option	Current Status and Gap
<p>5. Have the WTO agree that it will be bound for purposes of WTO dispute settlement by the judgments in any climate dispute settlement mechanism relating to climate compliance under those agreements. Provide that: A national measure taken by WTO Members which is found to be in furtherance of a national climate “contribution” in a climate agreement will be respected in WTO dispute settlement, and that such a measure will be exempt from what would otherwise be that WTO Member’s WTO obligations;</p> <p>Trade sanctions taken by one WTO Member against goods or services of another WTO Member pursuant to the terms of a climate agreement to which both those WTO Members are parties will be considered to be in compliance with WTO obligations.</p>	No steps taken
<p>6. Through a decision or some other legal action by the Members of the WTO, create a legal breathing space by establishing a “peace clause” for climate action. Such a “peace clause” could require WTO Members to wait at least three years before challenging national climate measures or countermeasures that restrict trade or otherwise have trade effects in WTO dispute settlement.</p>	No steps taken
<p>7. Through a common action by the UNFCCC and the WTO, clarify the differences, if any, between the concept of “common but differentiated treatment” in the climate regime and the concept of “special and differential treatment” in the trade regime, and, further, clarify the ways and the extent to which these forms of treatment should be acknowledged in dispute settlement involving trade-related climate measures.</p>	No steps taken
<p><b>Recognize embedded carbon in trade and revisit the concept of like products</b></p>	
<p>8. Initiate a joint effort by the WTO, the UNFCCC, and other relevant international institutions to establish an agreed common international standard for calculating the amount of carbon used in the making of traded products.</p>	No steps taken
<p>9. Agree on a “waiver” from WTO obligations for all trade restrictive “climate measures” that are based on the amount of carbon used in making a product and that are taken in furtherance of and in compliance with a UNFCCC climate agreement or with a plurilateral “climate club.”</p>	No steps taken
<p><b>Foster climate action through enabling the formation of climate clubs and coalitions</b></p>	
<p>10. Members of the WTO should affirm by a decision that climate measures taken pursuant to a climate agreement of the UNFCCC are measures falling within the scope of Article XX of the GATT and of Article XIV of the GATS, and will be entitled to the benefit of those general exceptions to the obligations in the WTO treaty provided they comply in their application with the conditions to those exceptions reiterated in Article 3.5 of the UNFCCC.</p>	No steps taken

Policy Option	Current Status and Gap
<p>11. Members of the WTO should agree on a set of circumstances in which there would be a presumption in favour of granting a waiver for a climate-related “club” organized outside the framework of the WTO to become a “plurilateral” agreement under the WTO treaty. Members of the plurilateral could commit to a set of rules on climate change that would be binding solely on them and would be fully enforceable in WTO dispute settlement.</p>	No steps taken
<p>12. Through a decision by the Members of the WTO: Affirm that an agreement by a climate “club” to provide “WTO-plus” trade benefits over and above those due under the WTO treaty to WTO Members that are members of that “club,” and not to those WTO Members that are not “club” members, is permissible under WTO rules; Provide that trade sanctions taken by a WTO Member pursuant to a plurilateral “climate club” or some other plurilateral climate agreement to which that WTO is a party against another WTO Member that is not a party to that plurilateral climate agreement will be in compliance with WTO obligations, only to the extent that the requirements of the GATT, the GATS, and other relevant WTO agreements are fulfilled.</p>	No steps taken
<p>13. Through a decision by the Members of the WTO, provide that: There is no territorial limitation to Article XX of the GATT, and that therefore WTO Members have the legal right to take measures domestically to address environmental harms that occur outside their national territory; Or, provide, more narrowly, only that there is no territorial limitation to Article XX of the GATT and Article XIV of the GATS for measures taken for climate reasons relating to the amount of carbon used in making traded products.</p>	No steps taken
<b>An agreed framework for emissions trading, carbon taxes, border measures</b>	
<p>14. Through a decision by the Members of the WTO, clarify the relationship between international emissions trading schemes and the WTO so as to: Ensure that WTO rules explicitly apply to international emissions trading; Permit importing countries to require importers to purchase emission reduction units under that country’s emissions trading scheme as a condition of importing; Affirm that grants of exemptions and “free allowances” in emissions trading schemes are actionable subsidies under WTO rules. This could be combined with a time-limited peace clause allowing for a phase-out of existing free allowances so as to avoid challenges in the Dispute Settlement Body.</p>	No steps taken but a more ambitious mandate on the lines of Para 31 (i) of the Doha Declaration (Clarifying the relationship between specific trade obligations in multilateral environmental agreements (MEAs) and WTO rules) could be envisaged in the future.
<p>15. Through a decision by the Members of the WTO, provide that a carbon tax or any similar tax based on the amount of carbon used in making a product is an indirect tax on a product that is therefore eligible for a “border tax adjustment” under Article II:2(a) of the GATT, either through a charge on an imported product or through a remission on an exported product, and, consequently, is not a violation of the prohibition against excessive taxation of imported products in Article III:2 of the GATT.</p>	No steps taken

**Make use of subsidies, standards, government procurement, intellectual property**

16. Mandate full disclosure of fossil fuel subsidies under WTO rules, affirm that fossil fuel subsidies are actionable subsidies under those rules, and agree on the gradual phase-out and ultimate prohibition of such subsidies.

No steps taken

17. Specify that article XX of the GATT applies to the Agreement on Subsidies and Countervailing Measures (ASCM), so that subsidies intended to support climate action may deviate from the general obligations.

Para 28 of the Doha Ministerial Declaration calls for negotiations aimed “at clarifying and improving disciplines under the Agreements on Implementation of Article VI of the GATT 1994 and on Subsidies and Countervailing Measures, while preserving the basic concepts, principles and effectiveness of these Agreements and their instruments and objectives, and taking into account the needs of developing and least-developed participants.” However this would depend on the eventual outcome of the Doha Round.

18. Ban “Buy National” government procurement and permit only non-discriminatory purchases of climate-friendly environmental goods and services under the WTO Government Procurement Agreement while encouraging more WTO Members to accede to that Agreement.

No steps taken

19. Enhance the clarity of current WTO rules on the permissibility of non-discriminatory environmental standards and technical regulations by encouraging high standards and regulations while barring both *de jure* and *de facto* discrimination. (See Article I and Article III of the GATT and Articles 2.1 and 2.2 of the TBT Agreement.)

No steps taken

20. Encourage the conclusion of mutual recognition and harmonization of environmental standards through use and enhancement of existing WTO rules, especially through the further development of international standards. (See Articles 2.6 and 2.7 of the TBT Agreement.)

The use of IEC and ISO International Standards is deemed consistent with the obligations of countries that are members of the WTO and both have adopted the WTO TBT Code of Good Practice for preparation, adoption and application of standards.

The IEC and ISO also developed various environment-related standards including in the following areas of climate mitigation: (i) Monitoring and measurement of greenhouse gas emissions (ii) Measuring the carbon footprint of networks and products (iii) Designing and building energy efficient homes and workplaces (iv) Benchmarking for good practices including environmental and energy efficiency labelling (v) Promoting good practice for environmental management and design, and for energy management (vi) Disseminating innovative technologies that promise to help reduce the effects of climate change (vii) Fostering the introduction of new energy-efficient technologies and services.

The IEC has a dedicated advisory committee on environmental aspects (ACEA). The ACEA coordinates and guides the IEC’s efforts to ensure that IEC International Standards don’t include specifications which would harm the environment. The IEC also has several technical committees working in the field of renewable energies, looking at areas such as hydropower, ocean power, solar energy, wind turbines, and fuel cell technologies.

In addition a number of bilateral mutual recognition agreements (MRAs) has been signed between countries although most of these have to do with conformity assessment and very few presume equivalence of standards. Many of the standards that are deemed equivalent have to do with technical specifications for products medical or electrical equipment and are not specifically related to the environment.

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**Policy Option**

21. Speed the spread of new green technologies by improving the provisions in WTO intellectual property rules on “green” technology transfer to least-developed and other developing countries. A new WTO working party should be appointed to explore and recommend ways of striking an appropriate balance to meet the needs for both access and innovation. (See Article 66.2 of the Agreement on Trade Related Aspects of Intellectual Property Rights—TRIPS.)

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**Current Status and Gap**

Ecuador submitted a proposal (IPC/W/585) at WTO TRIPS Council meeting on 11-12 June 2013 proposing a number of solutions to facilitate the transfer to developing countries of environmentally sound technologies that might be hindered by intellectual property rights. These included a reaffirmation of flexibilities in the TRIPS that would be available for green technologies, a review of a review of Article 31 of TRIPS, on “Other Use Without Authorization of the Right Holder,” and an evaluation of Article 33 of the TRIPS on the term of protection. The initial proposal has yet to find traction among a number of other WTO members. Discussions on the topic will continue in the context of the TRIPS Council.

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**Foster sectoral approaches, including maritime shipping and aviation**

22. Through a decision of the Members of the WTO, affirm that climate agreements affecting trade made by certain international organizations such as the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) will be upheld in WTO dispute settlement as to WTO Members that are parties to those agreements, but not to those WTO Members that are not.

No steps taken

23. The IMO should set a global target for carbon dioxide emissions in international maritime shipping.

More Can be Done: The IMO’s Marine Environment Protection Committee (MEPC) has so far not set a GHG emissions reduction target for the shipping industry. The committee pledged instead to continue analytic work in this area. This includes efforts on mandatory measures adopted in 2011 and effective from 2013 on improving the fuel efficiency of new and existing ships. The fuel efficiency objectives of these measures are relevant because they can reduce GHG as well as black carbon emissions. The fuel efficiency regulations are mandatory, tangible, in force—in the form of amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL)—and will evolve over time.

24. The IMO or a group of Arctic countries should reach an agreement on addressing black carbon and methane emissions in the Arctic region in particular, by adopting and enforcing performance standards for ships operating in the region.

More Can be Done: The Arctic Council has approved an Arctic Council Framework for Action titled “Enhanced Black Carbon and Methane Emissions Reductions.”

In this the eight member states commit to: “Develop and improve emission inventories and emission projections for black carbon using, where possible, relevant guidelines from the Convention on Long-Range Transboundary Air Pollution (CLRTAP) and improve the quality and transparency of information related to emissions of black carbon,” and “Enhance expertise on the development of black carbon inventories, including estimation methodologies and emissions measurements, by working jointly through the Arctic Council and other appropriate bodies...”

The IMO International Code for Ships Operating in Polar Waters, addresses safety and environmental issues for shipping in hazardous and environmentally vulnerable waters of the Arctic and Antarctic regions. The code will be mandatory through amendments under both MARPOL and the International Convention for the Safety of Life at Sea (SOLAS). It will enter into force on 1 January 2017. Black carbon has however not been included in the code. Perhaps in the future the code might be used to serve as a legal basis for expanding IMO regulations to mitigate Arctic black carbon. The IMO’s fuel-efficiency regulations will also contribute towards reducing black carbon emissions.

# Annex 1: Summary Table of Main Policy Options

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The experts all participated in their personal capacity. The views and recommendations expressed in the policy options paper are not attributable to any institution with which members of the E15 Expert Group are associated.



## International Centre for Trade and Sustainable Development

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