

UNILATERAL MEASURES AND CLIMATE CHANGE

BY

Anuradha R.V.

Partner, Clarus Law Associates

May 25, 2012



Centre for WTO Studies

IIFT Bhawan

B 21, Qutab Institutional Area New Delhi

**AN EARLIER VERSION OF THIS PAPER WAS CIRCULATED AT THE WORKSHOP
ON TRADE, CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT**

Organized by South Centre and UNDP, Geneva, November 15-16, 2011

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	2
EXECUTIVE SUMMARY	3
INTRODUCTION	5
I UNILATERAL MEASURES TO ADDRESS CLIMATE CHANGE	7
IA AVIATION EMISSIONS	8
IB MARITIME EMISSIONS	12
IC 'CARBON EQUALIZATION' UNDER THE REVISED EU-ETS	14
ID US LEGISLATIVE ATTEMPTS	16
IE CARBON LABELLING AND STANDARDS	18
II DOES THE WTO HOLD ANY ANSWERS FOR UNILATERAL MEASURES?	21
BROAD PRINCIPLES IN A POTENTIAL WTO DISPUTE	22
AVIATION ETS- POSSIBLE WTO CONCERNS	28
III THE USE OF TRADE MEASURES IN OTHER ENVIRONMENTAL AGREEMENTS	29
IV ELEMENTS FOR CONSIDERATION IN THE WAY FORWARD	30

ACKNOWLEDGEMENTS

The author thanks Mr. R.R. Rashmi, Joint Secretary, Ministry of Environment and Forests, and Mr. Abhijit Das, Head- Centre for WTO Studies, for their comments and guidance on an earlier version of this paper. This paper also benefited immensely from the comments and discussions at the South Centre-UNDP workshop on Trade, Climate Change and Sustainable Development held on November 15-16, 2011. The author would particularly like to thank Mr. Martin Khor, Director-South Centre, and Mr. P.K. Mohanty, Minister-Customs, Permanent Mission of India at Geneva, for their comments and suggestions. The author also gratefully acknowledges the research assistance provided Ms. Sumiti Yadava, Associate, Clarus Law Associates. The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of either the MoEF or the CWS. Any errors or oversights are attributable only to the author. The paper was financially supported by the MoEF.

EXECUTIVE SUMMARY

The United Nations Framework Convention on Climate Change (UNFCCC) under Article 3.5 provides that unilateral measures to address climate change concerns *should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade*. The Cancun Agreements reiterate this principle. This language however leaves open a broad canvas for interpretation. There are no triggers indicated under the UNFCCC on how and when such measures may be resorted to. In the absence of principles and criteria based on which such action may be taken, the circumstances for such action could be left open to different interpretations leading to different unilateral actions. This could pose several challenges to the multilateral system.

This issue is even more critical today in view of diverse range of unilateral measures that are beginning to be adopted or conceptualized. The very first example of unilateralism that countries are currently grappling with is the European Union's Directive on the Emission Trading System Directive (EU-ETS) as applicable to aircraft carriers. The Directive, which came into effect in January 1, 2012, requires all aircraft carriers (whether they are from EU or outside), carrying out "aviation activities" to and from EU aerodromes, should buy allowances equal to the CO₂ emissions of each flight (including those emissions attributable to the non-EU leg of a journey).

In addition to the aviation ETS requirement, the Revised Directive of 2009 of the EU-ETS outlines the policy mandate for EU legislators to consider making the EU-ETS applicable to importers. The Directive states that in the event other developed countries or *major emitters of greenhouse gases* fail to participate in an international agreement to curb emissions, such failure could put certain energy-intensive sectors of the EU which compete internationally, at an economic disadvantage. Based on this assessment, the Directive envisages the possibility of introducing an *effective carbon equalization system*. While the elements of the carbon equalization system are yet to evolve, its fundamental premise is that importers would have to comply with the *same* norms as EU manufacturers relating to emissions. The EU-ETS Directive also has a provision that allows for including maritime emissions in the ETS scheme by 2013 in the event the IMO does not arrive at any market-based measures. The EU has urged the IMO to push forward towards agreement on market-based measures to limit carbon emissions.

In the United States of America, legislative activity over the past three years has resulted in several versions of draft legislation on climate change which require that importers into the U.S. would need to buy carbon allowances when bringing in commodities in energy intensive and trade-exposed sectors, (such as steel, aluminium, or cement) from countries that fail to adopt carbon control programmes similar to that in the US. Such an approach seems to indicate that there would be no room for differential responsibilities between countries under an international agreement.

The rapid evolution of carbon standards and labelling requirements is another example of unilateral measures. While these are currently only voluntary in nature, their actual impact on goods from developing countries is yet to be estimated. Widespread use of such labels is likely to influence consumer choice, and thereby impact market access for imported goods from developing countries.

The impact of unilateral actions would be the following:

- Firstly, such actions clearly undermine the fundamental principle of the UNFCCC of *common but differentiated responsibilities and respective capabilities* by seeking to impose mandatory emission reduction requirements for *all* countries. This in essence would transfer the mitigation burden to countries that do not have any mandatory emission reduction obligations under the UNFCCC.

- A second critical problem with unilateral actions is that such actions would have a narrow sectoral approach that will stifle room for policy flexibility in countries. Unlike the current approach of the UNFCCC and the Kyoto Protocol which focus on economy-wide actions, unilateral actions by some countries would mandate emission reduction obligations in specific sectors of strategic importance to those countries, without taking into account the various economy wide efforts towards mitigation in a third country.

When a unilateral measure impacts trade, such a measure is likely to be tested for compatibility against the principles of the WTO Agreements. Existing WTO jurisprudence does not however hold any definitive answers to the question whether or not such measures would be held to violate WTO principles. Recent literature analyzing this issue indicates that such a dispute will throw up several new conceptual issues and challenges for the WTO dispute settlement mechanism, and existing jurisprudence is not definitive on how these issues would be ultimately evaluated. The other fundamental issues that would limit the use of WTO principles to resolve climate related unilateral measures, are that the WTO system does not recognize the principle of ‘Common-but differentiated Responsibilities and Respective Capabilities’ as enshrined under the UNFCCC. A trade measure designed to address climate change, while being tested at the WTO, is unlikely to be examined for its consistency with the UNFCCC principle of CBDR.

The WTO’s relevance would also be limited in the event the regulatory measure adopted by a country is not designed as a measures focusing on trade in goods or services. For example, in the event EU’s aviation ETS requirements are not measures that are directly applied on trade in goods or services. In the event these need to be tested against WTO principles, the first challenge would be to establish how the charge on airline operators would translate into adverse trade impact for goods being transported through air. The burden would be on the complaining party to demonstrate such adverse trade impact through clear factual evidence and reasoning.

Elements for Consideration in the Way Forward

Raising a dispute at the WTO therefore, is not likely to provide any real solution to the issue of unilateral measures in the climate change context. It would be best to address climate change issues within the UNFCCC context itself, and not entrust the WTO or any other international forum with the responsibility of adjudicating on such issues.

Any unilateral measures, including unilateral trade measures would be problematic from the point of view of developing countries if the circumstances and modalities of their imposition are left open to be determined through the unfettered discretion of countries.

It is against this background that Parties to the UNFCCC need to consider a framework of principles under which unilateral actions can be taken under Article 3.5. Article 3.5 is a fundamental provision of the UNFCCC and it is not the suggestion of this paper that this provision should be undermined, or rendered redundant. What can however be considered is a strong multilateral framework which would clarify the contours and limits for any unilateral action. This is important in order to ensure that no unilateral action becomes a tool through which emission reduction obligations are imposed in a manner that is contrary to the principles of the UNFCCC and any protocols concluded under the UNFCCC.

This paper outlines some of these options for discussion.

INTRODUCTION

In the climate change negotiations, there is almost universal agreement that (i) climate change is a global issue which has local impact, (ii) unilateral or local efforts are not sufficient to address the issue of such magnitude and (iii) multilateral efforts lie at the heart of any real solution to the global problem. The United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol to the UNFCCC represent significant milestones in the multilateral negotiations. Within this context, unilateral measures to address climate change are problematic due to their potential to undermine the multilaterally agreed rights and obligations of countries.

This issue is even more critical today in view of a diverse range of unilateral measures that are being adopted or conceptualized by different countries. The very first example of a unilateral action on grounds of climate change that is expected to come into effect soon is the European Union's Directive on the Emission Trading System Directive (EU-ETS) as applicable to aircraft carriers. The Directive requires that from January 1, 2012, all aircraft carriers (whether they are from EU or outside), carrying out "aviation activities" to and from the EU, should buy allowances equal to the CO₂ emissions of each flight (including those emissions attributable to the non-EU leg of a journey).

In addition to the aviation ETS requirement, the Revised Directive of 2009 of the EU-ETS contains provisions that provide EU legislators the option to consider making the EU-ETS applicable to importers (i.e., importers would have to comply with the same norms as EU manufacturers relating to emission allowances). The EU-ETS also envisages the possibility of bringing in maritime emissions within the purview of the ETS by 2013.

In the United States of America, legislative activity over the past three years has resulted in several versions of draft legislation on climate change which require that importers into the U.S. would be required to buy carbon allowances when bringing in commodities in certain energy intensive and trade-exposed sectors from countries that fail to adopt carbon control programmes similar to that in the US.

Another development is the evolution of carbon standards and labelling requirements. While these are currently only voluntary in nature, their actual impact on trade in goods from developing countries is yet to be estimated.

Each of the afore-mentioned developments would have implications for the climate policy choices that a country may want to adopt, and consequently financial implications. For instance, the EU-ETS on aviation is already compelling aircraft operators in non-EU countries to put in place compliance mechanisms and also arrange for the additional costs for such compliance.

The reason unilateral actions are particularly problematic from the perspective of the UNFCCC, is that Parties to the UNFCCC are not required to shoulder the same level of burdens in relation to climate change. In fact, the uniqueness of the UNFCCC and the Kyoto Protocol are that they clearly draw a distinction between the nature of measures that are to be

adopted by Annex I countries and non-Annex 1 countries, in view of the principle of “*common but differentiated responsibilities and respective capabilities.*” Only Annex I countries (i.e., developed countries) have quantitative targets and legally-binding commitments, while other countries have no quantitative targets of any kind. The preamble of the UNFCCC clearly recognizes the right and legitimate need of developing countries to achieve sustainable social and economic development and that energy consumption of developing countries will therefore need to grow. Article 3.4 of the UNFCCC states that sustainable economic development is essential for countries to adopt measures to address climate change. Article 4 specifies obligations for both developing and developed countries, and in Article 4.7 clearly links any obligation of developing countries to undertake climate change related action, to the technological and financial support received from developed countries.¹

A second critical problem with unilateral actions is that such actions would have a narrow sectoral approach that will stifle room for policy flexibility in countries. Unlike the current approach of the UNFCCC and the Kyoto Protocol which focus on economy-wide actions, unilateral actions by some countries would mandate emission reduction obligations in specific sectors of strategic importance to those countries, without taking into account the various economy wide efforts towards mitigation in a third country.

When unilateral measures, of the nature as discussed above, translate into financial implications for goods and services from countries with ‘differentiated responsibilities’, or mandate that all countries adopt the same policy choices relating to emission reductions as the country adopting the measure, the principle of common but differentiated responsibilities would clearly be undermined. In effect unilateral measures would result in non-Annex I countries undertaking emission reduction obligations that they are not otherwise mandated to do under the UNFCCC.

Article 3.5 of the United Nations Framework Convention on Climate Change (UNFCCC) recognizes that unilateral measures to address climate change concerns are possible subject to the caveat that such action *should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.* The Cancun Agreements reiterate this principle. The wording of Article 3.5 however leaves open a broad canvas for interpretation. There are no triggers indicated under the UNFCCC on how and when such measures may be resorted to. In the absence of principles and criteria based on which such action may be taken, the circumstances for such action could be debatable and left open to different interpretations, leading to different unilateral actions. This could pose several challenges to the multilateral system.

In the absence of clarity within the UNFCCC system, any use of unilateral trade measures is likely to result in a trade dispute under the World Trade Organization (WTO). Most commentators on this subject acknowledge almost universally that any unilateral action involving any tax or charge or other fiscal implication for imports, would be challenged

¹ Article 4.7 emphasizes that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.

under the rules of the WTO.² While relevant principles from the jurisprudence under WTO provide insights into how trade measures are likely to be addressed, it is not possible to conclude with certainty the outcome in a particular case. That would depend on several variables, such as the design and enforcement of such measure, as well as on whether or not the UNFCCC itself provides any clarity on the use of unilateral trade measures. Existing jurisprudence shows that there would be arguments possible for both justifying and challenging such measures under WTO principles.

Leaving the adjudication on a climate change related dispute to the WTO would not be desirable since WTO principles are ill-equipped to address the nuances of the climate change debate and the UNFCCC framework for common, but differentiated responsibilities of countries. The WTO's lens for examining such measures would be a very narrow one that would be limited to an assessment of whether or not there is less favourable treatment for imported goods, or whether or not imported goods from different countries are being treated in a like manner.

Moreover, the WTO's scrutiny would only be with regard to those unilateral measures which impact trade. In the case of unilateral measures that do not directly impose any requirements on imports, (for example, the EU-ETS norms for airline operators), the burden would be on the complaining party to establish how such measures adversely affect trade.

The ideal situation therefore would be for the Parties to the UNFCCC to resolve the problem of unilateral measures within the UNFCCC itself, by ensuring that there is no room for any unfettered unilateralism. For this, the UNFCCC parties would need to consider clear principles specifying the circumstances wherein a member country could take trade measures on the ground of climate change. Such a precedent is prevalent in other multilateral environmental agreements such as the Montreal Protocol on Substances that Deplete the Ozone Layer, and the Convention on International Trade in Endangered Species (CITES).

This paper will discuss in the various evolving unilateral measures based on climate change concerns, and the specific legal issues that they present for the multilateral framework, and then present a few thoughts on the manner in which such unilateralism could be contained within a framework of specific principles.

I UNILATERAL MEASURES TO ADDRESS CLIMATE CHANGE

² See, for example, Gary Hufbauer, Steve Charnovitz and Jisun Kim, *Global Warming and the World Trading System*, Peterson Institute for International Economics (2009); Jacob Werksman, *Trade Measures and Climate Change: Searching for Common Ground on an Uneven Playing Field*, WRI Working Paper (December 2009); Gabrielle Marceau, *WTO and Carbon Finance: Overview of the Key Issues*, Climate Finance, New York University Press (2009); Biswajit Dhar and Kasturi Das, *The European Union's Proposed Carbon Equalization System: Can it be WTO Compatible?* Research and Information System for Developing Countries, Discussion Paper 156 (Sept. 2009).

IA Aviation Emissions

Article 2.2 of the Kyoto Protocol to the UNFCCC states that the Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases from aviation fuels which are not controlled by the Montreal Protocol, by working through the International Civil Aviation Organization (ICAO). It is important to underscore the language of the Kyoto Protocol on aviation emissions- it specifies that ICAO norms would be applicable only for Annex I countries. As discussed in the Introduction to this paper, under the Kyoto Protocol, only Annex I countries (i.e., developed countries) have quantitative targets and legally-binding commitments, while other countries have no quantitative targets of any kind. The International Convention on Civil Aviation (Chicago Convention)- under which the ICAO operates, on the other hand, does not have a comparable principle. Within ICAO, therefore, many non-Annex I countries have argued that mitigation measures on their aircrafts would need to be consistent with the international climate change regime under the UNFCCC.

There is as yet no agreement on this aspect under the ICAO. However, a ICAO resolution of 2007 emphasized that countries should undertake market-based measures relating to aviation emissions only subject to multilateral or bilateral agreements.³ In 2010, the ICAO's 37th Assembly further deliberated on the issue of emissions and adopted ICAO Resolution A37-19 wherein countries resolved to work towards ways in which to ensure global fuel efficiency norms. The Resolution encouraged member states to submit their actions plans outlining their respective policies and actions, and annual reporting on international aviation CO₂ emissions to ICAO. Specifically on the issue of market based measures ("MBMs") in international aviation, ICAO members were urged to engage in constructive bilateral and/or multilateral consultations and negotiations with other States to reach an agreement.⁴

The legal impact of such a requirement would be that measures such as the EU's Aviation Directive can be enforced against an aircraft operator from a third country only if the EU has entered into an agreement with such country. However the EU registered a formal reservation on this point, stating that the paragraph on MBMs should not be construed as requiring that such measures may only be implemented on basis of mutual agreement between States. The EU has proceeded to unilaterally impose its Emission Trading System (ETS) requirements on aviation, which will be explained below.

ICAO Decision Making Process and the Impact of 'Reservations'

Reservations have been rarely filed at the ICAO.⁵ However, 63 countries (including EU members) have filed reservations on various aspects to the ICAO Resolution A37-19, which

³ ICAO Resolution A36-22, made at the 36th Assembly of ICAO during 2007, related to "*Market-based measures, including emissions trading*" specifically urged Contracting States to "refrain from unilateral implementation of greenhouse gas emission charges", and also to "not implement an emissions trading system on other Contracting States' aircraft operators except on the basis of mutual agreement between the States".

⁴ ICAO Resolution A37-19 (Paras 13 and 14), ICAO 37th Assembly, October 2010.

⁵ A reservation is a unilateral statement, however phrased or named, made by a state, when signing, ratifying, accepting, approving or acceding to a treaty, whereby it purports to exclude or to modify the legal

is said to constitute an unprecedented number of reservations in ICAO's history. The number of reservations clearly represent the lack of consensus on Resolution A37-19 between parties to the ICAO, especially between the developed and developing countries on a variety of issues. By making a reservation, countries seek to restrict the applicability of the relevant provision (in relation to which the reservation is being made) to the extent specified in the reservation. As pointed out above, EU's reservation on the Resolution seeks to 'reserve' for itself the policy space for unilateral action, which evidently infringes on countries which have 'reserved' for either non-applicability of market-based measures, or emphasized on principles of mutual agreement for market-based measures. Reservations by developing countries to the ICAO Resolution A37-19 overwhelmingly emphasize that any market-based measures should be applicable only on developed countries, and further that there should be respect for principles of bilateralism and multilateralism.⁶

Under international law, the issue of validity and effect of reservations is open to interpretation.⁷ Making of a reservation in itself may not guarantee immunity from unilateral action. Unilateral actions such as EU's ETS would therefore have to be tested against the core principles of the Chicago Convention such as territorial sovereignty and right to impose fees and charges.

Aviation under EU-ETS

The EU-ETS Directive requires that from January 1, 2012, the EU ETS will require, subject to limited exceptions,⁸ all aircraft carriers carrying out "aviation activities" to buy allowances

effect of certain provisions of the treaty in their application to that state: Article 2, Vienna Convention on the Law of Treaties.

⁶ For example, the reservation made by Argentina, Bolivia, Brazil, Cuba, India, Iran, Iraq, Libyan Arab Jamahiriya, Pakistan, Saudi Arabia, Venezuela emphasize that:

- All members States of ICAO are also member States of UNFCCC and they have to respect rights and obligations agreed under UNFCCC;
- Principles of CBDR should be respected, and that it is also applicable to addressing emissions from international aviation through ICAO assistance to developing countries (financial resources, technology transfer and capacity building);
- CBDR already provides clear framework for *de minimis* exception for all developing countries, actions from developed countries are obligatory, whereas developing countries may contribute voluntarily subject to receiving technical and financial support.
- MBMs are applicable to developed countries, in order to help them meet their commitments;
- Developing countries oppose any unilateral action by any single or a group of countries, and any measures applied must be based on mutual consent between all States involved and affected.

⁷ The 1969 Vienna Convention on the Law of Treaties, the 1978 Vienna Convention on Succession of States in Respect of Treaties and the 1986 Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations, set out some principles concerning reservations to treaties. The International Law Commission ("ILC") has noted that the provisions therein act as too general a guide to State practice and provide ambiguous answers to many pertinent questions like the validity of reservations (the conditions for the lawfulness of reservations and their applicability to another State) and the regime of objections to reservations (in particular, the admissibility and scope of objections to a reservation which is neither prohibited by the treaty nor contrary to its object and purpose). Consequently, the ILC has been considering draft guidelines constituting the guide to practice on reservation to treaties. However, this guide will have no binding legal effect on states.

⁸ For example, an airline operator may be exempted from this requirement in respect of flights landing in the EU where they come from a country which has itself taken measures to reduce climate change impact of flights

equal to the CO₂ emissions of each flight (including those emissions attributable to the non-EU leg of a journey). The definition of “aviation activities” is broad and captures the activities of airline carriers even if their country of establishment is outside the EU. Airlines will be required to surrender emission allowances to cover each tonne of carbon di-oxide emitted during the entire flight, including those parts of the flight that take place outside of the EU. The EC Directive affirms the right of EU Member States to determine the use of the revenues collected from airline companies, and these are not ear-marked in any specific manner.

The key concern arising from the EU-ETS requirement is that it imposes on airlines obligations in respect of monitoring and reporting of emissions in airspace outside of the EU and is therefore an extra-territorial enforcement of EU laws. Failure to comply attracts penalties. EU’s argument is that there is a direct territorial nexus of the ETS norms with the arrival or departure of flights from EU aerodromes. The jurisdictional basis for the Directive, EU has argued, is because it relates only to flights that arrive or depart from EU aerodromes.

The practical impact of the EU-ETS to airline carriers is the significant cost implications for transportation of both goods and passengers through air. Several countries- both developed and developing countries, have expressed their objections and concerns over EU unilaterally extending the requirement for emission allowances to non-EU airline carriers. Airline carriers from the U.S. (represented by the U.S. Air Transport Association- US ATA), have challenged the requirements in the UK administrative court as violating the requirements under the Chicago Convention. The main grounds for the challenge are that the ETS requirement is contrary to the customary international law principle that each State has complete and exclusive sovereignty over the airspace above its territory, which is restated under the Chicago Convention.⁹ The US ATA has further argued that by seeking to regulate US airlines in US airspace from their point of departure in the US, and across the Atlantic (with in many cases only a small proportion of their journey taking place over EU airspace), and by requiring them to give up allowances in respect of such flights, the EU-ETS requirement infringes the principle of sovereignty. The petition also makes several other arguments relating to provisions of the Chicago Convention relating to fees, duties and charges, the US-EU Bilateral Aviation Agreement, and also that EU’s action is against the spirit of the Kyoto Protocol which provides that the parties shall pursue reduction of greenhouse gas emissions from international aviation “working through the ICAO”.

The UK court has referred the matter to the European Court of Justice which is expected to issue a decision in early 2012. The ECJ’s Advocate General issued an opinion on October 6, 2011 which holds the view that extending of the EU-ETS to aviation does not interfere with the sovereignty of third countries and complies will all relevant aviation agreements. While

departing from it which land in the EU. Countries that engage in consultations with the EU to reach an agreement on aviation emissions may also be exempted; but no such exemption has been granted so far.

⁹ Article 1: The contracting States recognize that every State has complete and exclusive sovereignty over the airspace above its territory.

an Advocate General's opinion is non-binding, the ECJ has reportedly followed them in approximately 90 percent of all cases.¹⁰

The impact for developing countries, as highlighted earlier in this paper, will be significant especially because the multilateral framework of the UNFCCC and the ICAO does not require any emission reduction from aviation; and EU's unilateral action essentially seeks to enforce such a requirement in respect of aviation.

Representatives of 21 countries, including those of America, China, India, Japan, Russia, Argentina and the U.A.E., issued a joint declaration in September 2011, opposing the EU ETS as inconsistent with international law, including the Chicago Convention. The declaration emphasizes on the need to have a multilateral scheme. Subsequently, the U.S. House of Representatives have voted to prohibit U.S. carriers from participating in the European Union emissions trading scheme.¹¹

In the event there is no relief from EU's measure at the ECJ, the remaining venues for intervention would be the ICAO, the UNFCCC or potentially the WTO. The UNFCCC is likely to defer to the ICAO given the clear mandate under Article 2.2 of the Kyoto Protocol. With regard to the WTO, EU has not committed to Passenger and Freight transportation services under its schedule of commitments to the WTO's General Agreement on Trade in Services (GATS), which limits the possible remedies that may have been available under the GATS. Any potential argument in relation to principles of the General Agreement on Tariffs and Trade (GATT) in relation to trade in goods would need to be supported by clear data on the discriminatory impact of the aviation requirements on domestic goods and like imported goods. Since there is no direct imposition of any charge or tax on goods, the arguments would need to carefully build on the *de facto* implications for trade in goods through air transportation. The WTO related aspects will be discussed in some more detail in section II of this paper. In this section, I will explore the possible fall-outs under the Chicago Convention.

In the event the outcome of the US Airlines dispute at the ECJ does not result in a clear invalidation of EU's norms, and negotiations at the ICAO fail to resolve the conflict between the EU and other countries, then the other potential recourse for ICAO members would be the dispute resolution process under the Chicago Convention.

Dispute Resolution under the Chicago Convention

Chapter XVIII of the Chicago Convention establishes a mechanism for dispute resolution of disagreements arising between member States on issues of interpretation of the Chicago Convention. If negotiations between the governments fail to resolve the conflict, they may submit it to the ICAO Council for decision. An ICAO Council member that is party to the dispute cannot vote on that dispute. Appeals of the ICAO Council's decision may be made to

¹⁰ "European Court Opinion Suggests Aviation Levy Lawful", Bridges Weekly Trade News Digest, Volume 15 · Number 34, 12 October 2011.

¹¹ A law to this effect H.R. 2594, was passed by the House of Representatives on October 24, 2011, and at the time of writing of this paper, it had been placed for approval by the U.S. Senate.

the International Court of Justice (ICJ) or an ad hoc arbitral tribunal, depending upon the disputing parties, and the decision of the ICJ or arbitral tribunal, as the case may be, shall be final and binding.

So far, an overwhelming number of international aviation disputes have been resolved informally, rather than through adjudication or arbitration. Since promulgation of Chicago Convention, only five disputes¹² have been submitted to the ICAO for formal judicial resolution, but the ICAO Council has not issued a formal decision on the merits of the case in any of them. Of these, it is instructive to take note of the dispute resolution process in the case of *United States v Fifteen European Nations (2000)*, which was the first dispute filed for adjudication before the ICAO Council that involved an issue other than an airspace restriction by the EU. The US complained against an EU regulation regarding airport noise rules that it believed placed disproportionate burden on US airlines. The ICAO Council voted in favour of the US. The parties thereafter continued negotiating with the assistance of senior ICAO officials, and ultimately the relevant EU regulation was repealed. This case demonstrates the potential role that ICAO could play in helping to resolve the current dispute as well. For any effective solution to emerge however, consensus building among ICAO members is a clear imperative.

IB Maritime Emissions

As in the case with aviation emissions, Article 2.2 of the Kyoto Protocol to the UNFCCC also deals with greenhouse gas emissions from maritime bunker fuels, and states that the Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases from bunker fuels by working through the International Maritime Organization (IMO). Discussions at the IMO have been focused on development of an efficiency index and GHG emission controls, and comprises three distinct building blocks: (i) technical measures; (ii) operational measures, and (iii) market-based measures.

In mid-July 2011, the IMO adopted mandatory measures to reduce emissions of GHGs from international shipping by amending the International Convention for the Prevention of Pollution From Ships (MARPOL), Annex VI for the prevention of air pollution from ships. The new IMO regulations apply to all ships that exceed 400 gross tonnage, and make the Energy Efficiency Design Index (EEDI) mandatory for new ships and the Ship Energy Efficiency Management Plan (SEEMP) mandatory for all ships.¹³ China, Chile, Brazil, Kuwait and Saudi Arabia voted against the amendment, whereas 49 countries voted in favour.¹⁴ Developing countries are entitled to a 'waiver mechanism' from the EEDI requirements till 2019. Thus, new ships registered in developing countries need to be EEDI-compliant by July 2019, whereas new ships registered in developed nations will have to be

¹² India v Pakistan (1952), United Kingdom v Spain (1969), Pakistan v India (1971), Cuba v United States (1998), United States v Fifteen European Nations (2000)

¹³ <http://www.imo.org/MediaCentre/PressBriefings/Pages/42-mepc-ghg.aspx>

¹⁴ India, South Africa, and Cuba have also reportedly objected but were not eligible to vote because they are not signatories to Annex VI.

EEDI-compliant by January 2013. It is also interesting to note that during negotiations, EU, USA, Australia and Japan wanted to retain a provision enabling denial of entry into port to non EEDI-compliant ships, thus putting pressure on shipbuilders to order EEDI-compliant ships despite the waiver. However, developing countries secured a commitment to delete the paragraph dealing with denial of port entry.¹⁵

Normally decisions under MARPOL are taken by consensus. However in the event there is no consensus, the MARPOL provides that decisions can be adopted by two-thirds majority of ratifying states representing 50% of the gross tonnage of the world's merchant fleet. In the case of EEDI amendment, as noted above, there are 49 votes in favour and 5 against the amendment proposal. This amendment shall be deemed to have been accepted on 1 July 2012 and shall enter into force on 1 January 2013 unless prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments.¹⁶

The key requirement under EEDI is that ships would need to be built in accordance with the norms, and carry a certificate to validate this aspect. The guidelines on calculation, survey and certification of EEDI, are yet to be developed.

As of now, there are no market-based measures for regulating maritime emissions under the MARPOL; but MARPOL parties have recognized the need to discuss this aspect. An Expert Group has been constituted in this regard and its scope of the work is to evaluate the various proposals on possible MBMs, with the aim of assessing the extent to which they could assist in reducing GHG emissions from international shipping, giving priority to the maritime sectors of developing countries, least developed countries and Small Island Developing States. The proposals for market-based measures under review by the group ranges from a contribution or levy on all CO₂ emissions from international shipping or only from those ships not meeting the EEDI requirement, via emission trading systems, to schemes based on a ship's actual efficiency, both by design and operation.¹⁷ The actual evolution of these principles remains to be seen. As in the case of aviation emissions, the key aspect for concern in the evolution of any market-based mechanisms in relation to maritime bunker fuel would be that it should not operate in a manner that prejudices the flexibilities that developing countries have under the UNFCCC. In the absence of consensus among countries, and with opposition from key developing countries to the EEDI requirement as discussed above, the evolution and implementation of any levy on bunker fuels, is likely to be a controversial requirement. Given the overwhelming majority of countries supporting the EEDI requirement (49 votes and only 5 oppositions), developing countries would perhaps need to think of alternative positions and strategies, such as the exact implications of a delayed implementation, technical and financial assistance for adapting to the new requirements, and

¹⁵ "International Shipping; the first industry with a global climate standard"; www.transportenvironment.org

¹⁶ "Amendments to the Annex of the Protocol of 1997 to Amend the International Convention for the Prevention of Pollution from Ships, 1973, as Modified by the Protocol of 1978 Relating Thereto", Resolution MEPC.203(62); Adopted on 15 July 2011

¹⁷ <http://www.imo.org/ourwork/environment/pollutionprevention/airpollution/pages/further-progress-made-by-mepc-61---september---october-2010---on-technical,-operational-and-market-based-measures.aspx>

perhaps differential levels of bunker fuel levy, if any. The point to be emphasized here is the need for clear multilateral understanding on subject which would not leave any room for unilateralism.

With aviation emissions having been built into the EU-ETS as a unilateral move, the next area for concern for any potential unilateral action by the EU is likely to be maritime emissions. The EU-ETS Directive has a provision that allows for including maritime emissions in the ETS scheme by 2013.¹⁸ The EU has urged the IMO to push forward towards agreement on market-based measures to limit carbon emissions.¹⁹ The EU Roadmap on Maritime Emissions states that in the event IMO fails to resolve this issue, then EU would consider various policy options in respect of ships entering or leaving EU ports, such as inclusion of shipping in EU-ETS, or an emissions tax, or a mandatory operational or design efficiency standard for all ships, or some form of a differentiated credit system based on operational efficiency indicators.²⁰ While the measure as being contemplated by the EU will be on ships, the economic impact for trade in goods is likely to be more significant than in the case of the aviation norms.

IC ‘Carbon Equalization’ under the Revised EU-ETS

The ‘Carbon Equalization system’ is part of the climate and energy package adopted by the EU in April 2009. The EU-ETS comprises of four legislative texts. The issue of carbon equalization is addressed in one of these legislative texts, the Directive 2009/29/EC of April 23, 2009, which amends Directive 2003/87/EC (also referred to as the “Revised EU-ETS Directive”). The Revised EU-ETS Directive is premised on the commitment to reduce the overall greenhouse gas emissions by 20 per cent below 1990 levels by 2020, and by 30 per cent, *if* an international agreement is concluded under the UNFCCC committing “*other developed countries to comparable emission reductions and economically more advanced developing countries to contributing adequately according to their responsibilities and respective capabilities*”.²¹

Possibility of “Carbon Leakage”

¹⁸ Recital 3 of the Directive 2009/29 states as follows: *In the event that no international agreement which includes international maritime emissions in its reduction targets through the International Maritime Organisation has been approved by the Member States or no such agreement through the UNFCCC has been approved by the Community by 31 December 2011, the Commission should make a proposal to include international maritime emissions according to harmonised modalities in the Community reduction commitment, with the aim of the proposed act entering into force by 2013. Such a proposal should minimise any negative impact on the Community’s competitiveness while taking into account the potential environmental benefits.*

¹⁹ <http://ictsd.org/i/news/bridgesweekly/110920/>

²⁰ See, “Measures to include maritime transport emissions in the EU’s greenhouse gas reduction commitment if no international rules agreed”, (October 2010), http://ec.europa.eu/governance/impact/planned_ia/docs/2012_clima_001_greenhouse_maritime_transport_en.pdf

²¹ Para 3, Revised EU ETS Directive.

Para 24 of the Revised EU-ETS Directive envisages ‘carbon leakage’ as a possibility *in the event other developed countries or major emitters of greenhouse gases fail to participate in an international agreement to curb emissions*. It states that such failure could result in increased GHG emissions in third countries where industry is not subject to *comparable* carbon restraints and put certain energy-intensive sectors of the EU which compete internationally, at an economic disadvantage.²²

Based on this assessment, the Directive provides for two options with a view to putting installations from the EC that are at “significant risk of carbon leakage” and those from third countries *on a comparable footing*. These are (a) to raise the amount of free allocation of emissions to energy-intensive industries that are determined to be exposed to a significant risk of carbon leakage or, (b) introducing an *effective carbon equalisation system*.

The elements of the carbon equalisation system are yet to be developed. As of now, the EU Directive outlines certain principles:

- (i) requirements on importers from third countries should be no less favourable than those applicable to installations within the Community;
- (ii) any action taken would need to be in conformity with the principles of the UNFCCC, in particular, the principle of common but differentiated responsibilities and respective capabilities, taking into account the particular situation of least developed countries (LDCs); and
- (iii) the requirement for conformity with EU’s international obligations, including obligations under the WTO agreements.

Main Concerns with the EU-ETS

From the perspective of developing countries, the primary concerns with the ‘carbon equalization’ proposal in the EU-ETS are as follows:

- Obligations on developing countries: The EU-ETS places the primary onus for emission reductions on developed countries, whose obligations need to be ‘comparable’ under the EU Directive. But the Directive also states that developing countries which are *economically more advanced* are required to take some form of action under international negotiations and contribute *adequately* according to their responsibilities and respective capabilities. What the EU would consider as *economically more advanced* and how it would assess adequacy of commitments, however, is not clear.
- Carbon leakage: The directive specifies that ‘carbon leakage’ could result if other developed countries *or major emitters of greenhouse gases* fail to participate in an international agreement to curb emissions. The criteria to determine *major emitters of greenhouse gases*, as in the case of *economically more advanced developing countries* referred to in the preceding paragraph, are not specified.

²² Para 24, Revised EU-ETS Directive.

More importantly, the text of the directive in relation to ‘carbon leakage’ refers to carbon leakage resulting in industry in third countries not subject to ‘comparable’ carbon restraint. In other words, any responses to carbon leakage are likely to be based on *comparability* of controls over industry, as compared to the EU, both in other developed countries and developing countries that qualify as ‘major emitters’. This obligation is different from the previous paragraph wherein comparability of action was envisaged only for ‘other developed countries’. By expanding comparability of action for ‘major emitters’, the directive potentially widens its coverage from only developed countries to include developing countries that are major emitters as well.

The main concern with the proposed ‘carbon equalization’ is that such measures would potentially be applied on importers from developing countries that do not have ‘comparable’ emission reduction commitments as the EU. Such a measure would run counter to the balance of rights and obligations under the UNFCCC. It is true that EU seems to predicate any potential carbon equalization action based on the outcome of the current negotiations on post-2012 commitments. However, it has reserved for itself the possibility that if there is no international agreement on the post-2012 scenario; *or* if such an agreement fails to address comparability of emission reductions, then it would consider carbon equalization provisions. Such a possibility clearly seeks to indicate that EU has unilaterally determined what a negotiated outcome should comprise of (i.e., a unilateral determination of what can be considered to be ‘comparable’), and indicates the possibility of unilateral action if such an outcome is not in accordance with its expectations.

ID US Legislative attempts

While the U.S. as yet does not have a law on emission reductions, there have been several bills that have been prepared and considered, each of which has provisions on importers into the US. The US House of Representatives on June 26, 2009, passed the American Clean Energy and Security Act (ACESA). The Act’s stated aim is to deploy clean energy resources, increase energy efficiency, cut global warming and pollution, and transition to a clean energy economy. The ACESA would need to be passed by the US Senate before it can be implemented. At the Senate, the “Clean Energy Jobs and American Power Act”, also known as Kerry-Boxer Bill (“KB Bill”), was introduced in September, 2009. In May 2010, this version was replaced by the “American Power Act”, also called the Kerry-Lieberman Bill. Debates and discussions continued until June 2010 with no concrete outcome. Uncertainty continues to prevail over US climate policy and it is not entirely clear whether or not the US will proceed with ACESA’s provisions for border measures against imports.

The main concern for developing countries in view of these legislative attempts is likely to be that merely being a party to an international agreement, (such as the UNFCCC or the Kyoto Protocol) may not be enough, if such multilateral agreements do not adhere to the imperatives listed under the relevant US law. One version of the bill clearly states that the U.S. imperative

is that “*all major greenhouse gas-emitting nations to contribute equitably to the reduction of global greenhouse gas emissions.*”

Nevertheless, for the purposes of our discussion, it would be useful to examine briefly the key elements on border measures of the ACESA, as well as the KB Bill. Both the ACESA as well as the KB Bill, deal with the International Reserve Allowance Program. The requirements under these provisions are for importers to buy carbon allowances when bringing in commodities in energy intensive and trade-exposed sectors, (such as steel, aluminium, or cement) from countries that fail to adopt carbon control programmes similar to that in the US. The border adjustment would take effect in 2020 to the extent that carbon-related competitive gaps remain with other countries and are not covered by the allowance rebates.

The main concern for developing countries is likely to be that both the ACESA and the KB Bill indicate that merely being a party to an international agreement, (such as the UNFCCC or the Kyoto Protocol) may not be enough, if such multilateral agreements do not adhere to the imperatives listed under the relevant US law. Other important concerns with regard to the provisions of the ACESA and the KB Bill are as follows:

- The U.S. Government expresses its commitment to international negotiations and to the conclusion of a multilateral agreement that commits “*all major greenhouse gas-emitting nations to contribute equitably to the reduction of global greenhouse gas emissions.*” (Emphasis added). The basis on which such countries would be identified is not provided in the ACESA or the Kerry Lieberman Bill. However, the US has been very clear in its political statements that such countries would necessarily include India and China.
- Section 777(c) of the Kerry Lieberman Bill states that ‘exemptions’ from the international allowance programme would apply to countries *only* if an international agreement, to which both a third country and US are a party, requires that the country undertakes “*at least as stringent*” obligations as that required under US legislation. This clearly indicates that such agreement would have to ensure that the required GHG reduction by countries is *as stringent as* US’s domestic law. The US approach, therefore, seems to indicate that there would be no room for differential responsibilities between countries under an international agreement. The Bill’s exemptions are only in respect of countries that have GHG intensity²³ that is equal to or less than the US. This also reflects that there may be no room for *differential responsibility* under any international regime and that the only acceptable regime is GHG intensity that is “equal to or less than the US.”
- Both ACESA and the KB Bill had provisions that set forth targets for emission reductions within the US, and established a number of mechanisms to address the cost

²³ ‘GHG intensity’ is an indicator that measures quantity of emissions per unit of economic output. GHG emissions are measured in tons of carbon dioxide (CO₂), or in CO₂ “equivalent” tons, in case of other GHGs such as methane (CH₄) or nitrous oxide (N₂O).

impact on consumers and businesses and to support clean energy technologies. It also established refundable tax credits and various funds to address the economic burden for domestic businesses and allowed for unlimited borrowing from future allowances, and banking of future allowances without any restrictions or penalties. For importers into the US, however, there were no provisions relating to allocation of free allowances, banking of allowances or borrowing from future allowances.

IE Carbon Labelling and Standards

Another growing area of concern is the development of carbon ‘footprint’ standards and labelling requirements. A label is primarily an informational tool which can inform and influence consumer choice. The theory behind carbon labelling is that by informing a consumer about the greenhouse gas emissions of a particular product, consumers could be guided to make choices towards products that have a lesser GHG emission impact, i.e., a lower carbon ‘footprint’. But there is still ambiguity and difference of views on the methodology to be adopted for ensuring accurate information dissemination.

For example, food items are one of the key focus areas for labelling programmes, through indication of ‘food miles.’ This term is commonly used to measure the distance travelled by food products between production and consumption. The development and application of this term has been motivated by two primary concerns: (i) the argument that the further that a food product(s) travels from where they are produced to where they are consumed, the greater the consumption of energy, and hence the greater the emissions of greenhouse gases; and (ii) an argument that sourcing food close to where it is produced can generate important benefits to the local economy and stimulate ‘regional development’. As has been observed in a study for the Government of Victoria, Australia, ‘food miles’ were noted to be an inadequate and potentially misleading measure of the environmental and economic impact of food.²⁴ The study concluded that distance travelled is not necessarily a good indicator for transport emissions, and fails to consider other environmental impacts (including other greenhouse gas emissions) associated with food production, and that further, there may be negative impacts on economic development by effectively penalising non-locally produced food.²⁵

In view of the limitations of ‘food miles’, developments at ‘carbon labelling’ have focused at providing a more complete picture of emissions generated through the entire ‘life-cycle’ of a product, i.e., from raw material extraction through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling. However, there is no uniform methodology as yet for the life-cycle analysis (LCA) or life-cycle energy analysis (LCEA), and difference of opinion exists on how such assessment can lead to a complete and accurate account of the renewability of energy flows or the toxicity of waste products. Most

²⁴ Ismo Rama And Patrick Lawrence, *Food Miles- A Critical Evaluation*, Economics and Policy Research Branch, Victorian Department of Primary Industries (14 April 2008).

²⁵ Id.

importantly, any such analysis would have significant cost implications, which products from developing countries may not be in a position to comply with.

There is recognition even in developed countries such as the UK on the complexities of any carbon labelling, and the extent to which it can be applied to all consumer goods. The Environmental Audit Committee in the UK House of Commons for instance has noted in its report of 2009 that:²⁶

“Attempts to reach lifecycle footprints even for basic products can result in complex calculations based on a highly hypothetical average usage. ... [A] carrot could be eaten raw, cooked in a microwave, or boiled in a pan of water. It is difficult to see how any in-use measurement for food and drink products could ever be of genuine use to a consumer, whereas labels allowing them to select locally-produced or organically grown carrots could engage their interest and have a significant impact in at least one environmental dimension. For shampoo, only seven per cent of its carbon footprint is in the manufacturing, bottling and distribution; 93 per cent comes from heating the water and using the product itself. Information of this kind would be of little use to consumers: their choice becomes irrelevant as most shampoos would have a similar in-use impact.”

While most standards and labels are *voluntary* in nature as of now, there would be significant concerns if: (a) they communicate misleading information and thereby impact trade; and (b) these were to mature into formal technical regulations or de facto mandatory standards.

There has been a rapid proliferation of labels and standards relating to carbon emissions. A few key examples are outlined below.

UK Carbon Trust's Carbon Reduction Label

UK's Carbon Trust is an independent company established by the British Government, and has developed the PAS 2050- which is the standard for measuring carbon. The 'Carbon Reduction Label' developed by the Carbon Trust provides information on the GHG emissions emitted at every stage of a product's life-cycle, including production, transportation, preparation, use and disposal.

French Legislation on Carbon Labelling: Grenelle 2

Grenelle 2 was passed on June 28 and 29, 2010 by the French Senate and National Assembly. It outlines a programme on environmental/carbon declaration for consumer products. The programme has started with a trial phase of one year from 1 July 2011. The trial is applicable for both French and foreign participants for final consumer products. The trial environmental labelling scheme will be followed by an assessment as to whether or not it should be mandatorily applied. The environmental information that is required to be made available must include the CO₂ equivalent content of the products. The law specifies the methodology to be used.

²⁶ United Kingdom House of Commons- Environmental Audit Committee, "Second Report on Environmental Labelling" (March 2009), available at <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmenvaud/243/24302.htm>

Germany's Blue Angel scheme

The Blue Angel (Blauer Engel) is a German certification for products and services that have environmentally friendly aspects, and is typically hailed as the world's oldest 'eco-label'.²⁷ It is awarded based on considerations relating to benefit to the environment, standards of serviceability and health and occupational protection. Economical use of raw materials during production and use, a long service life and a sustainable disposal, are factors involved in use of the certification.

Japan Carbon Footprint (TS Q 0010)

The framework for the Japanese Carbon Footprint system is contained in Technical Specification TS Q 0010.²⁸ The Life Cycle Assessment (LCA) method is used to calculate the amount of GHG emissions related to a product from the stage of raw material acquisition to disposal or recycling. Independent third party verification is essential. Carbon footprint labels or CFPs are required to provide information on the absolute value of CO₂ equivalent emissions.

Development of International Standards on Carbon Labeling

Apart from country specific standards, the International Organization for Standardization (ISO) has also been engaged in development of international standards and labelling. The ISO is an international federation of standardizing bodies from 159 countries. ISO is engaged in development of voluntary standards. ISO requirements for voting and adoption of standards are based on a complex set of principles. A standard is adopted by the ISO as an international standard if two-third members are in favour and the negative is not more than one-fourth.

While these do not have legally binding value, ISO standards have been considered relevant for determining 'international standards' for the purposes of WTO's Agreement on Technical Barriers to Trade (TBT Agreement).²⁹ The TBT Agreement requires parties to base their technical regulations on 'international standards', and WTO jurisprudence has acknowledged that such standards would include those developed by the ISO. In the mid-1990s, ISO's Technical Committee (TC) 207 on environmental management began to issue its 14000 series of environmental management standards, a process which is still ongoing. One of the key developments under the ISO 14000 series is ISO 14001 on environmental management systems (EMS) which seeks assist an organization "to develop and implement its environmental policy and manage its environmental aspects," including "organizational

²⁷ http://www.blauer-engel.de/en/blauer_engel/index.php

²⁸ Japanese Technical Specification: TS Q 0010, "General Principles for the Assessment and Labelling of Carbon Footprint of Products". Under this specification, organisations are required to define a 'calculation coverage' on each of the following stages in accordance with the 'system boundary concept': raw material acquisition; production; distribution/selling; use/maintenance control and disposal/recycling. In cases where it is difficult to make a calculation or to gather data the calculation coverage in the stages in the life cycle can be defined in the "Product Category Rules".

²⁹ The WTO Appellate Body has also held that to qualify as an international standard, these do not need to have been adopted by 'consensus': European Communities-Trade Description of Sardines, WT/DS231/AB/R

structure, planning activities, responsibilities, practices, procedures, processes and resources." Also included in the 14000 series are standards for environmental assessments, product labeling and declarations, life cycle assessment, environmental communication, and greenhouse gas emission reporting.

As with all ISO Standards, including the ISO 14000 series, the key issue is whether these adequately capture balanced set of views on the subject. As explained earlier, ISO is an international consortium of national standardizing bodies, and the ISO process involves harmonization of potentially disparate national standards. National delegations at the ISO comprise of large number of industry representatives from developed countries. ISO as a forum may not therefore capture and reflect a balanced representation of views on environmental issues. The lengthy and complicated process for adoption of ISO standards, sand the expense of attending frequent overseas meetings, essentially means that ISO meetings are dominated by developed country industry, and may not adequately reflect developing country views on development of standards.

II DOES THE WTO HOLD ANY ANSWERS FOR UNILATERAL MEASURES?

As discussed briefly in the introduction, unilateral measures which impact trade are likely to be raised as a trade dispute at the WTO.³⁰ Existing WTO jurisprudence does not however hold any definitive answers to the question whether or not such measures would be held to violate WTO principles. Recent literature analyzing this issue indicates that such a dispute will throw up several new conceptual issues and challenges for the WTO dispute settlement mechanism, and existing jurisprudence is not definitive on how these issues would be ultimately evaluated.³¹

Apart from the jurisprudential issues in the WTO context (which will be briefly discussed below), the other fundamental issues that would limit the use of WTO principles to resolve climate related unilateral measures, are the following:

- 1) *No room for the CBDR principle*: The WTO system does not recognize the principle of ‘Common-but differentiated Responsibilities and Respective Capabilities’ as enshrined under the UNFCCC. A trade measure designed to address climate change, while being tested at the WTO, is unlikely to be examined for its consistency with the UNFCCC principle of CBDR. While WTO Agreements do have provisions dealing with ‘special and differential treatment’ for developing countries, the thrust of such provisions is different from the UNFCCC’s CBDR principle. In the WTO context, the focus of such provisions is primarily on technical assistance (as in case of agreements dealing with technical standards and sanitary and phyto-sanitary measures), or higher thresholds for developing countries (as in the case of subsidies action). Any

³⁰ Supra n.1

³¹ This is also the broad conclusion in two recent reports provide summarize the existing literature in this regard: WTO-UNEP, *Report on Trade and Climate Change* (2009); and National Board of Trade, *Climate Measures and Trade*, (Sweden, February 2009).

assessment of the WTO consistency of specific measures would be focused on whether these are within the contours of the WTO regime.

- 2) *Not all Unilateral Measures would be directly targeted at trade.* The WTO's relevance would also be limited in the event the regulatory measure adopted by a country is not designed as a measure focusing on trade in goods or services. For example, in the event EU's aviation ETS requirements are not measures that are directly applied on trade in goods or services. In the event these need to be tested against WTO principles, the first challenge would be to establish how the charge on airline operators would translate into adverse trade impact for goods being transported through air. The burden would be on the complaining party to demonstrate such adverse trade impact through clear factual evidence and reasoning.

Broad Principles in a Potential WTO Dispute³²

While nothing definitive can be stated about a WTO assessment of trade measures to address climate change, it would nevertheless be useful to examine the possible arguments and conceptual challenges inherent in dealing with a case involving such measures. The US bills and the EU-ETS Directive's proposed 'carbon equalization' programme essentially propose to impose costs on a foreign producer through an obligation to purchase emission allowances (as in the case of the US) or some sort of 'carbon equalisation' in the case of the EU. At the heart of these allowances/ equalisation programme, is a charge/tax being imposed on imports based on the process of production – in this case, in respect of the energy used in the production process. The provisions of GATT 1994 against which such a measure would need to be addressed include:

Article II:1(b) which prohibits 'other duties or charges' in excess of those levied on the reference date, which are also required to be recorded in a country's schedule of commitments under the GATT.

Article II.2(a), which deals with the nature of charges that may be imposed at the border, in order to create parity between like domestic products and imported products.

Article III.2 and **Article III.4**, which deal with the principle of national treatment in respect of internal taxes and regulations as applicable to imported products.

Agreement on Technical Barriers to Trade which deals with principles that technical regulations and standards (such as labelling standards) need to conform to in order to ensure that such regulations/ standards are not more trade restrictive than necessary to fulfil a legitimate objective, and that they do not become unnecessary obstacles to trade.

³² This section draws on the discussions in a previous paper by this author: Anuradha R.V., "Unilateral Carbon Border Measures: Key Legal Issues", ICRIER Policy Series No. 2 (July 2011), available at http://www.icrier.org/pdf/Policy_Series_No_2.pdf

In any potential dispute, the defending party would first argue consistency of the measure with the afore-mentioned provisions, and then also likely invoke the General Exceptions to GATT obligations, especially the exceptions in respect of environmental grounds under Article XX(b)³³ and Article XX(g).³⁴ As discussed above, existing WTO jurisprudence does not provide any clear answers on the likely outcome of such measures. It would be useful to highlight here some of the inherent analytical and jurisprudential concerns that arise in the context of any potential examination of climate change related trade measures under the WTO.

Charges on Carbon as charges in excess of that committed under a country's GATT Schedule

Article II:1(b) prohibits 'other duties or charges' in excess of those which are recorded in a country's schedule of commitments. Since charges in relation to the energy consumed in the manufacture of a product are not aspects that are incorporated into the schedule of commitments of any WTO member, the argument that could be developed is that such charges are against Article II:1(b) of GATT. However, the defending party in such a case would argue that the emission related charge would need to be considered as a border tax adjustment that is allowed under Article II.2(a), which will be discussed next.

Charges on Carbon as a Border Tax Adjustment

GATT Article II.2 (a) allows WTO members to impose on the importation of any product a charge equivalent to an internal tax (e.g., a border tax adjustment or a BTA). The conceptual challenge to extending a BTA to imports based on the energy consumed in the process of production is whether the BTA can be extended to components of energy (such as coal or oil) involved in the production process of an imported item, but which are not physically embodied in the product. Any tax or charge on energy consumption would target the process or production method of the product in a foreign country.

An important source for understanding BTAs is the Report of the Working Party on Border Tax Adjustments, which was constituted in 1968 to understand the scope and application of BTAs. The Working Party's consensus was that such measures could be imposed in respect of *indirect taxes* imposed on domestic products; however, it did not comment on taxes in respect of energy consumed in a manufacturing process or on whether taxes have to be on inputs that are physically embodied in the final product. Neither the GATT nor the WTO dispute settlement bodies have had occasion so far to determine the issue. The only comparable precedent is the GATT Panel decision in the *U.S.-Superfund* case,³⁵ which involved US's Superfund Act under which the US levied taxes on imports of certain chemicals as well as end products of the chemicals. The amount of tax on any of the imported

³³ Article XX(b) deals with exception on the ground that a measure is "necessary to protect human, animal or plant life or health".

³⁴ Article XX(g) deals with exception on the ground that a measure is "relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption".

³⁵ United States- taxes on Petroleum and Certain Imported Substances, *Report of the Panel adopted on 17 June 1987 (L/6175 - 34S/136)*.

substances equalled in principle the amount of the tax which would have been imposed under the Superfund Act on the chemicals used as materials in the manufacture or production of the imported substance if the taxable chemicals had been sold in the United States for use in the manufacture or production of the imported substance.³⁶ With regard to the end products, the panel did not comment on whether these chemicals still had to be physically present in the imported product, since that was not one of the issues discussed.³⁷ Nothing definitive can therefore be said about how a WTO Panel or Appellate Body would examine the issue of a border tax adjustment involving the carbon emissions involved in the production process of an imported good, despite such emissions not being embodied in the final good.

Applying principles of Article III on National Treatment: 'Internal Tax' under Article III:2

As noted above, Article II.2(b) provides that any charge applicable on imported goods has to be *equivalent* to an internal tax imposed consistently with the provisions of Article III.2. Article III.2 of GATT states that imported products shall not be subject to internal taxes *in excess* of those applied to domestic products.

In any Article III assessment, the threshold issue for assessment is whether an imported product produced through a mechanism having higher emissions, is *like* a domestic product. Existing WTO jurisprudence with its emphasis on an assessment of the physical characteristics of a product as a key element for assessing *likeness*, is likely to find that the concerned imported product and domestically produced product, are indeed *like*.

The question in the context of the present discussions is whether the obligation for a domestic industry to participate in a scheme for undertaking emission reduction obligations (as provided under the proposed US law or in the EU under the ETS), could be understood as equivalent to the requirement to pay an internal tax. Views are again conflicting in this regard. Some commentators are of the view that an emission-trading scheme cannot be equivalent to an internal carbon tax and doubt if such a wide interpretation of “tax” would be upheld in a WTO dispute.³⁸ However, it has also been observed that if the measures are designed in a manner such that the focus is on *auctioning* allowances, there would be a payment to the government, which would thus support an argument that such a measure is *equivalent* to a tax.³⁹

In this regard, it is important to note that currently, both the proposed US legislation and EU-ETS have a significant component of *free allowances* for domestic industry. The US proposal, as highlighted above, also has provisions allowing companies to *bank* their allowances indefinitely for future use. How these elements are factored into the eventual

³⁶ Id., Para 25

³⁷ For further discussion and analysis of this case, see Ian Sheldon, “Climate Policy and Border Tax Adjustments: Some New Wine Mixed with Old Wine in New Green Bottles?”, The Estey Centre Journal of International Law and Trade Policy, Vol. 11, Nov. 2009.

³⁸ Robert Howse and Antonia Eliason, “Domestic and International Strategies to Address Climate Change: An Overview of the WTO Legal Issues”, Cambridge University Press (2008)

³⁹ National Board of Trade, *Climate Measures and Trade*, (Sweden, February 2009), citing De Cendra, “Can emissions trading schemes be coupled with border tax adjustments? An analysis vis-à-vis WTO Law”, Review of European Community and International Environmental Law 15:2, 2006.

pricing of allowances are likely to significantly affect the evaluation of whether or not these measures can be considered to be *equivalent* to a tax.

Applying principles of Article III on National Treatment: 'Internal Regulations' under Article III:4

Another critical limb of the national treatment principle is Article III.4 which addresses “all laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use” of products and mandates countries to ensure that such regulations should not treat imported products less favourably than domestic products.

The question that arises in this regard is whether the imposition of carbon emission norms and requirements for purchase of allowances, can be characterised as laws, regulations and requirements *affecting* a product that is *like* a domestic product, and whether such regulations *affect* the product in a manner so as to treat imported products less favourably than domestic products. The word “affecting” in Article III.4 has been interpreted by the WTO Appellate Body as having a “broad scope of application”. In the *Korea – Various Measures on Beef* case,⁴⁰ the Appellate Body found that imported products are treated less favourably than like products if a measure modifies the conditions of competition in the relevant market to the detriment of imported products.

The principal impact of the EU and US legislations as outlined earlier in this paper, is the differential treatment of physically *like* imported products, based on an assessment of the climate change related regulatory policies in the country of origin. The concept of *likeness* is also inherently acknowledged in the design of especially the US legislation, which states as its rationale the need to address competitiveness concerns relating to the product. The extent to which the US and EC would be able to justify that their treatment of imported products is on *par* with regulations on domestic products and that it does not constitute *less favourable treatment* for imported products, will depend on the factual background and actual design and application of such measures. The EU-ETS, for instance, states that the carbon equalisation system would apply to importers *treatment that is no less favourable* than those applicable to installations within the EC. Whether the actual design and implementation of the measures treats importers in a less favourable manner would have an impact on assessing whether the WTO considers such treatment to be *less favourable* or not.

Article XX- General Exceptions to GATT Obligations

Whatever be the actual characterisation of emission related measures on imported products along the lines discussed above, the key question for a WTO dispute settlement body would be to assess whether such measures are consistent with WTO norms. Assuming that there is a finding of violation of basic GATT principles under Articles II or III as discussed above, the defending party would seek likely justification for such measures on the basis of the General Exceptions to GATT obligations specified under Article XX. Both the US legislative proposals and the EU-ETS specify that their action against third-country importers would

⁴⁰ WT/DS161/AB/R; WT/DS169/AB/R

depend on the outcome of international negotiations on this aspect. This seems to be a fallout of a key WTO Appellate Body ruling on the use of Article XX in the *US-Shrimp-Turtle* case,⁴¹ which emphasised the need for finding multilateral solutions before resorting to unilateral action.

At the outset, it must however be emphasised that jurisprudence under Article XX that has emerged so far deal with measures which have been *applied*. Any ex-ante assessment based on the current state of understanding of the US and EU legislative measures will, therefore, be limited only to highlighting possible issues for consideration in a potential dispute scenario.

As explained above, Article XX deals with ‘General Exceptions’ to obligations under the GATT. Two exceptions are of particular relevance to the protection of the environment: paragraphs (b) and (g) of Article XX. According to these two paragraphs, WTO members may adopt policy measures that are inconsistent with GATT disciplines, but which are:

- Art. XX(b): “necessary to protect human, animal or plant life or health”; or
- Article XX(g): “relating to the conservation of exhaustible natural resources.”

The ability to pursue the policies listed under Article XX is, however, limited by the chapeau to Article XX, which states that the availability of these exceptions is “*subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade*”. As discussed above, the wording of Article 3.5 of the UNFCCC reflect the language of the chapeau to Article XX of GATT.

An Article XX assessment involves a two-step process: (a) the first step addresses whether a measure can be provisionally categorised under one of the exceptions of Article XX, in this case (b) and (g). The second step involves assessing the application of such measures under the tests specified in the chapeau to Article XX (in italics in the preceding paragraph).

There have been several prominent disputes at the WTO dealing with the trade and environment interface under Article XX(b) and (g).⁴² The main propositions that emerge from existing case law are that:

- Trade restrictions on environmental grounds can be adopted under certain strict conditions.
- Tests of *necessity* and availability of *less trade restrictive measures* need to be applied prior to application of any trade restriction on environmental grounds. The Appellate

⁴¹ *United States- Import Prohibition of Certain Shrimp and Shrimp containing Products*, WT/DS58/AB/R

⁴² *United States- Standards for Reformulated and Conventional Gasoline* WT/DS/1 (20 May 1996); *United States- Import of Certain Shrimp and Shrimp Products* WT/DS/58 (6 Nov., 1998), *United States- Import of Certain Shrimp and Shrimp Products- Recourse to Article 21.5 of the DSU*, WT/DS/58 (21 Nov. 2001); *Brazil-Retreaded Tyres, Measures Affecting Imports of Retreaded Tyres*, WT/DS332/AB/R.

Body in *Brazil-Retreaded Tyres*,⁴³ while assessing the *necessity* test under Article XX(b), has observed that a measure's "contribution to the achievement of the objective must be material, not merely marginal or insignificant."⁴⁴ One of the ways in which "necessity" has been addressed in cases is to assess whether less trade restrictive alternatives are reasonably available.

- Lack of flexibility in taking into account the different situations in different countries amounts to unjustifiable discrimination.
- Under certain circumstances, a country would also be able to defend the position that its measure pertains to activities beyond its territorial jurisdiction. But before taking such measures, there is an obligation on countries to negotiate multilateral solutions to resolve the environmental issues. A WTO member is therefore required to make *serious efforts to negotiate* such solutions. If despite such efforts, an agreement cannot be concluded, then trade measures for protection of environment may be taken, even outside that country's jurisdiction. The manner in which this aspect was dealt with in the *US-Shrimp Turtle dispute*,⁴⁵ is discussed below.

Assessing Extra-Territorial Action of Measures affecting Trade

The *US-Shrimp Turtle dispute* involved a US measure that conditioned market access for shrimps into the US, based on an assessment of whether the exporting member had regulatory mechanisms to ensure that the shrimps were caught by trawlers that used "turtle excluder devices" (TEDs) in their nets. Such a measure, clearly, was a unilateral prescription by the US of regulatory mechanisms in areas beyond its jurisdiction.

The Appellate Body also found that the requirements under US law which required the exporting country to have the *same* legal requirements as that of the US amounted to 'arbitrary discrimination' under Article XX, since they mandated that countries should have regulatory schemes that are "essentially the same" as the US programme, without inquiring into appropriateness of that programme for the conditions prevailing in the exporting countries.⁴⁶

What is of greater significance is the analysis by the WTO Appellate Body of US action under a subsequent proceeding regarding implementation in the same case.⁴⁷ This proceeding was initiated by Malaysia (which was one of the original complainants along with India), which sought to argue that the US had failed to implement the WTO ruling. Malaysia argued that "arbitrary and unjustifiable discrimination" under the chapeau of Article XX required the *conclusion* of an international agreement, and that the US had not achieved this. The Appellate Body upheld the implementation panel's finding and rejected Malaysia's contention, based on its reasoning that the test of non-arbitrariness and non-discrimination under the chapeau to Article XX did not require the *conclusion* of an international agreement; but that this test would be satisfied if the US could

⁴³ *Brazil- Retreaded Tyres, Measures Affecting Imports of Retreaded Tyres*, WT/DS332/AB/R.

⁴⁴ *Id.*, Para 210.

⁴⁵ *United States- Import Prohibition of Certain Shrimp and Shrimp containing Products*, WT/DS58/AB/R

⁴⁶ Para 161-164, 177, of the AB Report.

⁴⁷ WTO Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products – Recourse to Article 21.5 of the DSU by Malaysia* ("U.S. – Shrimp (Article 21.5 – Malaysia)"), WT/DS58/AB/RW, adopted 21 November 2001, DSR 2001:XIII, 6481.

demonstrate that it had made ‘serious efforts’ to negotiate.⁴⁸ The Appellate Body did not go into reasons why an international agreement could not be concluded, and whether there were reasons relating to inflexible negotiating position or lack of consensus because of a wider array of issues. Importantly, the Appellate Body also held that it is open to an importing country to require exporting countries to adopt regulatory programmes that are “comparable in effectiveness” to the importing country.⁴⁹

Aviation ETS- Possible WTO Concerns

As discussed earlier in this paper, not all unilateral measures can be characterized as those affecting trade in goods. One example of this is the ETS aviation requirements, which are requirements applicable both on EU and non-EU airline carriers. However, these requirements do not impose any specific costs directly on imported goods or services. It is a cost that is being imposed on airline carriers, and therefore has a direct impact on ‘aviation services’. The EU has not committed to passenger and freight transportation services under its schedule of commitments to the WTO’s General Agreement on Trade in Services (GATS), which limits the possible remedies that would have been available under the GATS. For the purpose of considering the issue under the GATT, clear data and information will need to be documented to assess how the EU-ETS is impacting trade in goods.

A key issue for assessment is whether the ETS requirement on airline carriers can be characterized as a law, regulation or requirement that *affects* the sale, offering for sale, purchase, transportation, distribution or use of goods in the EU market. While there is no direct jurisprudence on this issue, there are a few principles which can be used as the basis for developing the arguments in this regard. The thrust of these principles would be to establish that the ETS measure affects trade in goods, is resulting in "less favourable treatment" of imported products. This is a factual inquiry, which will need to be substantiated through concrete examples, the burden for which would be on the complaining parties.

As discussed in this paper, the initial line of challenge being adopted by countries is to challenge the EU ETS measure on airline operators within the principles of the ICAO. Should that strategy not yield the desired result, potential WTO actions may be considered, depending on a factual assessment of the impact of the requirement on imported goods.

The point however to be underscored is that a WTO dispute may not really present any clear answers or solutions to the problem of unilateral action. It is fraught with limitations of the WTO framework, whose focus and objectives are very different from that of the UNFCCC. Any real solutions to the problem of unilateral actions addressing climate change would therefore need to be addressed within the framework of the UNFCCC.

⁴⁸ Ibid., para 133-134

⁴⁹ Ibid., para 143-144.

III THE USE OF TRADE MEASURES IN OTHER ENVIRONMENTAL AGREEMENTS

At this stage, it would be useful to briefly examine two other international environmental law instruments that specify trade-related measures: the Montreal Protocol on Substances that Deplete the Ozone Layer and the Convention on Trade in Endangered Species (CITES). Both provide a clear framework for multilateral principles for exercise of trade measures. In both these cases, the exercise of such trade measures is not a 'unilateral action' in the strict sense of the term, but rather actions of a party sanctioned through the multilateral processes as outlined in these instruments. Nevertheless, the basic principles for exercise of such measures provide valuable pointers to how the use of trade measures for environmental purposes needs to be streamlined.

Montreal Protocol

The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer was concluded under the framework of the Vienna Convention for the Protection of the Ozone Layer. Trade measures were incorporated in the Montreal Protocol both as an incentive to encourage countries to participate in the measures to protect the ozone layer and to provide a framework within which countries could have access to ozone-depleting substances during their transition periods. Measures restricting trade with non-parties were incorporated to ensure that such non-parties do not secure an economic or trade advantage over parties. With regard to parties to the Protocol, measures for non-compliance could be arrived at only through multilateral consultations. Article 8 of the Protocol requires parties to consider and approve procedures and institutional mechanisms for determining non-compliance with the provisions of the Protocol and for treatment of parties found to be in non-compliance. The Copenhagen Amendment to the Protocol concluded in 1992 laid down the non-compliance procedure and the list of measures that the Conference of Parties may take against one of the parties found to be in non-compliance. This includes trade measures. The important point to be noted is that no unilateral action is envisaged for non-compliance by a party to the Protocol. Any action for non-compliance, including any trade related responses, are to be taken only at the Meeting of the Parties.

CITES

The focus of trade measures in CITES is two-fold: (i) controlling trade in endangered species and (ii) specific trade measures in the form of ban on imports from parties or non-parties who are unwilling to implement the convention. Such specific trade measures are based on an evaluation by the COP on whether a country's legislation is inadequate to implement the provisions of the CITES.

Recommendations to suspend trade in specimens of CITES-listed species are made by the COP and the Standing Committee. A recommendation to suspend trade provides a period of time during which the relevant country can move from non-compliance to compliance

by, *inter alia*, making progress in the enactment of adequate legislation, combating and reducing illegal trade, submitting missing annual reports or responding to specific recommendations of the Standing Committee concerning the implementation of Article IV of the Convention. Recommendations to suspend trade are withdrawn immediately upon a country's return to compliance.

Like the Montreal Protocol discussed above, CITES' approach to trade measures also stems from a multilateral determination regarding compliance. This brief overview of CITES and the Montreal Protocol are only meant to provide examples of how other multilateral environmental agreements have addressed trade concerns. Both emphasise the principle for trade measures against non-parties or against parties for non-compliance, but do not allow for such measures unless the procedures prescribed under the agreements for multilateral evaluation have been satisfied. In other words, neither envisages the space for any unilateral action. Another significant element in both instruments is that they envisage "trade measures" only as a last resort for enforcing compliance.

IV ELEMENTS FOR CONSIDERATION IN THE WAY FORWARD

As can be seen from the examples discussed above, there are different manifestations of unilateral action which are being contemplated, and in the case of EU-ETS's aviation emission norms, these will be implemented in the next few months. In relation to each of the examples, the ultimate impact would be financial implications for countries arising on account of differential emission reduction norms in such countries. While the UNFCCC is based on recognizing differentiated obligations of countries, unilateral action by a few countries would undermine such differentiation by mandating the *same* level of obligations by all countries. This would in effect be tantamount to passing the mitigation burden to countries that are not be required by the UNFCCC to shoulder such burdens in the first place.

Unilateral action by any one country carries with it the risk of chaos and disagreement. When such action impacts trade (as in the case of border taxes on imports), these are likely to result in WTO disputes. While such a dispute would throw up several new conceptual issues and challenges for the WTO dispute settlement mechanism, existing jurisprudence is not definitive on how these issues would be ultimately evaluated. Raising a dispute at the WTO therefore, is not likely to provide any real solution to the issue of unilateral measures in the climate change context. In any event, it would be best to address climate change issues within the UNFCCC context itself.

Countries are engaged in several multilateral forums to debate and develop agreeable standards and thresholds on various issues relating to climate change (e.g., ICAO and IMO). In such a scenario, unilateralism poses a significant threat to amicable decision making not just under the UNFCCC, but under each of these other forums as well. In view of this, several countries have expressed strong concern and opposed the use of unilateral measures relating to climate change, arguing that such measures would have serious implications for the balance of rights and obligations that a multilateral agreement may hope to achieve.

As discussed earlier in this paper, Article 3.5 of the UNFCCC provides that unilateral measures to address climate change concerns are possible, and subjects such action to the caveat that such action *should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade*. Article 3.5 is a fundamental provision of the UNFCCC and it is not the suggestion of this paper that this provision should be undermined, or rendered redundant. The wording of Article 3.5 however leaves open a broad canvas for interpretation. There are no triggers indicated under the UNFCCC on how and when such measures may be resorted to. In the absence of principles and criteria based on which such action may be taken, the circumstances for such action could be debatable and left open to different interpretations, leading to different unilateral actions. This could pose several challenges to the multilateral system.

The first option for consideration in this regard therefore is a clear prohibition of unilateral measures against developing countries, on the reasoning that they are not required to undertake emission reduction obligations under the UNFCCC and protocols there-under. The proposal from developing countries, including India, which were part of the negotiating texts at Copenhagen and Cancun, have emphasized that unilateral trade measures (tariff and non-tariff measures) or any other border trade measures, should not be used against developing countries. Such a prohibition has been opposed by developed countries whose argument has been that such a provision would amount to a suspension or waiver of any measures under Article 3.5 in respect of developing countries.

It is in this context that certain alternative options may also need to be considered, with a view to minimising the need and opportunity for use of *any* unilateral measures, *including* unilateral trade measures. It should also be noted that in the absence of a definition of *unilateral trade measures*, there could be interpretational questions on whether any market-based mechanisms such as EU ETS's aviation requirements, or any potential maritime bunker fuel levy, which are not directly imposed as charges on trade in goods or services, would qualify as 'unilateral trade measures'. Such measures clearly would have implications for trade in goods and services, and there would be strong arguments for qualifying them as such. However, by focusing only on 'unilateral trade measures', as opposed to *any* unilateral measure, developing countries are perhaps running the risk of keeping the window open for imposition of other unilateral measures which could also have the impact of undermining the framework of rights and obligations under the UNFCCC.

The discussion in this paper demonstrates that *any* unilateral measures, including unilateral trade measures would be problematic from the point of view of developing countries if the circumstances and modalities of their imposition are left open to be determined the unfettered discretion of countries to determine. As is clear, any exercise of unilateral measures on the ground of climate change would have the impact of requiring developing countries to undertake emission reduction obligations that they are not otherwise required to do under the UNFCCC. Such a consequence would contravene the fundamental principles and provisions of equity, common but differentiated responsibility and respective capabilities, and the other principles enshrined in the UNFCCC. It is against this background that Parties to the

UNFCCC need to consider a framework of principles under Article 3.5, which provide the basis for exercise of unilateral action. This is important in order to ensure that no unilateral action becomes a tool through which emission reduction obligations are imposed in a manner that is contrary to the principles of the UNFCCC and any protocols concluded under the UNFCCC.

The underlying premise is that a multilaterally agreed framework of principles for exercise of unilateral measures under Article 3.5 would need to be considered in order to ensure that there is no room for unfettered unilateralism. Such principles can broadly be divided into two categories: (i) action against non-parties; and (ii) action against parties for non-compliance with their obligations. These are elaborated below.

1. *Use of Unilateral Measures against non-parties*: This principle would ensure that no party to a binding protocol under the UNFCCC can take any unilateral trade measures related to climate change against another party to such a protocol. Such unilateral measures should be confined only to non-parties to such a Protocol.
2. *Use of Unilateral Measures only to ensure compliance and enforcement of obligations of Parties to a Protocol, subject to a multilateral framework for assessment*: Trade measures against parties to binding agreement/protocol should be confined only for purposes of compliance and enforcement. Multilateral procedures would need to be developed for this which could envisage trade measures as a last resort to enforce compliance, but only on the basis of multilateral scrutiny and approval through an established institutional mechanism. The broad features of such a mechanism could include the following:
 - The procedures should provide for multilateral determination of non-compliance followed by multilateral authorisation of measures to obtain compliance, (drawing on principles set by the Montreal Protocol and the CITES);
 - The multilateral procedures should provide for transparency, reporting, surveillance, consultation, arbitration and dispute settlement elaborately designed to ensure that members implement their obligations; and
 - Trade measures should be the last resort for multilateral authorisation after all other steps have failed to obtain compliance.