

Climate Change Architecture Series



# Multilateral Negotiations at the Intersection of Trade and Climate Change



An overview of Developing Countries'  
Priorities in UNCSD, UNFCCC and WTO Processes

By Manuel A. J. Teehankee, Faculty of Law, Ateneo de Manila University  
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ICTSD Global Platform on Climate Change, Trade and Sustainable Energy



International Centre for Trade  
and Sustainable Development

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**Published by**

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The concept of the paper has been elaborated by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the German Ministry of Economic Cooperation and Development (BMZ) of Germany GIZ and ICTSD jointly. The research process has been informed by policy research and dialogue undertaken by the Global Platform on Climate Change, Trade and Sustainable Energy at ICTSD over the past years. In particular, meetings with climate negotiators in parallel with the negotiating sessions of the UNFCCC, as well as during dedicated workshops and events; with trade negotiators, notably during meetings of the Geneva Reference Group on Trade and Climate Change; and ICTSDs participation in PrepComs for the Rio +20, are worth mentioning in this context.

Lead authors of the paper are Manuel A. J. Teehankee, Ingrid Jegou and Rafael Jacques Rodrigues. Substantive input and support during the research process have been provided by Eduardo Calvo, Sonja Lubecki and by the Programme on Innovation, Technology and Intellectual Property of ICTSD. Rafael Jacques Rodrigues and Sonja Lubecki have edited the paper.

The authors are grateful to Judith Blank for helpful feed-back and guidance, to Vivien Liu and Ludivine Tamiotti for valuable assistance and feedback regarding committee records and documents. They further wish to acknowledge the useful comments received from Peter Govindasamy, Thiago de Araújo Mendes and Tosi Mpanu Mpanu, as well as from Joachim Monkelbaan, Malena Sell and Marie Wilke of ICTSD.

This paper was produced under the Global Platform on Climate Change, Trade and Sustainable Energy. It is funded primarily by the GIZ. In addition, ICTSD is grateful for the support of its core and thematic donors including the UK Department for International Development (DFID); the Swedish International Development Cooperation Agency (SIDA); the Netherlands Directorate-General of Development Cooperation (DGIS); the Ministry of Foreign Affairs of Denmark (Danida); the Ministry for Foreign Affairs of Finland; the Ministry of Foreign Affairs of Norway; Australia's AusAID; the Inter American Development Bank (IADB); and Oxfam Novib.

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Citation: Teehankee, Manuel; Ingrid Jegou and Rafael Jacques Rodrigues; (2012); *Multilateral negotiations at the intersection of trade and climate change - An overview of developing countries' priorities in UNCSD, UNFCCC and WTO processes*; Climate Change Architecture Series; Issue Paper No. 2; International Centre for Trade and Sustainable Development, Geneva, Switzerland.

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The views expressed in this publication are those of the authors and do not necessarily reflect the views of ICTSD or the funding institutions.

ISSN 1816 6970

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## LIST OF ABBREVIATIONS AND ACRONYMS

|         |   |
|---------|---|
| ALBA    | Bolivarian Alliance for the Peoples of Our America                        |
| AOSIS   | Alliance of Small Island States   |
| AR4     | Fourth Assessment Report of the Intergovernmental Panel on Climate Change |
| AWG-LCA | Ad Hoc Working Group on Long-term Cooperative Action under the UNFCCC     |
| BTA     | Carbon-Related Border Tax Adjustment                                      |
| CDM     | Clean Development Mechanism   |
| COP     | Conference of the Parties   |
| CER     | Certified Emission Reductions   |
| CTCN    | Climate Technology Centre and Network                                     |
| CTE     | Committee on Trade and Environment  |
| CTESS   | Committee on Trade and Environment Special Sessions                       |
| DDA     | Doha Development Agenda   |
| EEDI    | Energy Efficiency Design Index  |
| EGS     | Environmental Goods and Services  |
| EPR     | Energy-intensive, highly-polluting, resource-based                        |
| ETS     | Emission Trading Scheme   |
| GATT    | General Agreement on Tariffs and Trade                                    |
| GDP     | Gross Domestic Product  |
| GGPK    | Green Growth Knowledge Platform   |
| GHG     | Greenhouse gases  |
| HFC     | Hydrofluorocarbon   |
| ICAO    | International Civil Aviation Organization                                 |
| ICTSD   | International Center for Trade and Sustainable Development                |
| IEA     | International Energy Agency   |
| IMO     | International Maritime Organization                                       |
| IPCC    | Intergovernmental Panel on Climate Change                                 |
| IPRs    | Intellectual property rights  |
| LDCs    | Least Developed Countries   |
| MBI     | Market-based Instrument   |
| MCTF    | Multilateral Clean Technology Fund  |
| MEA     | Multilateral Environmental Agreement                                      |
| MOP     | Meeting of the Parties  |
| ODA     | Official Development Assistance   |
| OPEC    | Organizations of the Petroleum Exporting Countries                        |
| PPMs    | Non-product related processes and production methods                      |
| SBSTA   | Subsidiary Body for Scientific and Technical Advice                       |
| SDG     | Sustainable Development Goals   |

|        |  |
|--------|--|
| SEGS   | Sustainable Energy Goods and Services                              |
| SIDS   | Small Island Developing States                                     |
| SEEMP  | Ship Energy Efficiency Management Plan                             |
| SME    | Small and Medium-sized Enterprise                                  |
| STO    | Specific Trade Obligation  |
| TEC    | Technology Executive Committee                                     |
| TRIPS  | Agreement on Trade-Related Aspects of Intellectual Property Rights |
| UNCSD  | United Nations Conference on Sustainable Development               |
| UNCTAD | United Nations Conference on Trade and Development                 |
| UNEP   | United Nations Environmental Programme                             |
| UNFCCC | United Nations Framework Convention on Climate Change              |
| WSSD   | World Summit on Sustainable Development                            |
| WTO    | World Trade Organization   |



## FOREWORD

Climate change is an urgent, serious threat to modern civilization. Increasingly frequent and concordant reports bolstering the science of climate change, regularly underscored by palpable extreme weather events - frequent flooding, storms of unprecedented magnitude, protracted droughts - remind each and every one of us almost daily of the immediate need for climate action.

Although the developed countries are the ones primarily responsible for causing the problem, the world's response in terms of mitigation needs to be global, with a degree of differentiation with respect to mitigation efforts. Indeed, if only developed countries were to reduce their emissions, the result would be insufficient to adequately slow the dangerous trend the world is faced with today. Moreover, the emission of a tonne of carbon dioxide results in the same degree of damage, irrespective of a given country's level of development.

Given the global nature of the threat, all countries will be affected by climate change - even those that have contributed little to the problem. Typically, poor countries will be the worst hit, with the poorest in these countries being the most exposed and least resilient to the risks. In addition, policies to address climate change undertaken by one country are susceptible to having an impact on other countries.

Altogether, this means that climate change is an issue which must be given priority by all countries, including developing countries.

Trade can have an important role to play both in the mitigation of, and adaptation to climate change. Increasingly sourcing goods from countries abundant in clean energy, or enhancing trade in climate-friendly goods and services can constitute significant abatement opportunities. Similarly, using trade and trade reform to enhance economic diversification can reduce vulnerability to both the physical impacts of climate change and to the related policies. Moreover, trade can allow countries to ensure food security in times of drought, flooding, and periods influenced by more sustained climate changes, as well as provide new sources of income and employment in adaptation strategies.

At the same time, trade opportunities can be hampered by measures implemented to address climate change. Examples of this are regulation of international transport, or measures to adjust for carbon costs at the border. Also, concerns for adverse effects of climate mitigation such as carbon leakage - closely related to trade - have even held countries back from taking effective mitigation action.

Therefore, it is necessary for the global community to address the trade and climate change nexus. A number of multilateral fora and processes - each with their own specific mandate and scope and, typically, their respective limitations - are available to help coordinate the process. In this paper, the authors examine how three parallel processes deal with trade as it relates to climate change: the UN process devoted to sustainable development, the United Nations Conference on Sustainable Development (UNCSD) - most notably, the process leading up to the Rio+20 meeting; the UN climate change governance through the United Nations Framework Convention on Climate Change (UNFCCC); and the multilateral trading system through the World Trade Organization (WTO). The paper then maps developing country priorities and positions regarding trade as it relates to climate change as stated in these three fora. The reason for studying developing countries in particular is that while they are often described as acting as one single group, they consist of a large number of very diverse countries, with different vulnerabilities to climate change, different abatement opportunities and facing varying degrees of pressure to contribute to climate mitigation. Also, while some are open and trade dependant, others are less involved in international trade. Thus,

different developing countries have very different needs and interests in the fields of trade and climate change. Getting an overview of how these needs are understood and articulated will help the world community to better respond to them.

The three fora share very similar objectives when it comes to the trade-climate and/or environment nexus, in that they all are committed to ensuring that environmental measures do not unnecessarily hamper international trade. The UNCTAD and the WTO also share a more positive agenda of reforming trade so as to promote climate change/environment action. In spite of this, the paper finds that the most equally spread concern among developing countries is that their trade could be restricted by climate policies. In particular, they fear the use of “unilateral measures”. The “positive agenda” is characterised by a lack of progress and/or implementation in both fora addressing it.

According to the findings of the paper, there is a lack of clarity and of consensus on what venue is most appropriate for addressing the trade and climate change nexus. This, the authors say, has led to a certain degree of “bouncing” of issues between fora. As a consequence, much attention has over the years been devoted to process rather than to a substantive discussion. The authors argue that this makes it more difficult for countries to prepare and articulate their positions. Therefore, the authors suggest that, given the imperative to address the trade and climate nexus, countries should engage in a discussion focussed on defining the roles of the different fora with respect to addressing the trade and climate interlinkages.

With respect to the needs and priorities of developing countries as expressed in the different processes, the authors find that whereas the country coalitions vary between the fora, the positions stated are overall consistent. A fear of green protectionism and a priority to benefitting from technology transfer are the most commonly expressed positions shared by the broad majority of developing countries. The authors further foresee a change to the composition of coalitions over the coming years, following the recent developments in Durban in the UNFCCC, most notably the weakening of the principle of common but differentiated responsibility. This should likely encompass a modification of priorities, so that the positions better reflect the actual needs and concerns of individual countries. In order for this to be made possible, it is imperative that the international processes create designated spaces for discussion on the issues at stake to take place.

This paper is a joint effort, drawing on the expertise of negotiators on trade and climate change in the three fora, and on ICTSD experience from supporting the three processes over more than a decade. Lead authors are Manuel A. J. Teehankee, former ambassador of the Philippines to the WTO and former chair of the WTO body housing the negotiations on environmental goods and services; Ingrid Jegou, Manager of ICTSD’s Global Platform of Climate Change, Trade and Sustainable Energy, and Rafael Jacques Rodrigues of ICTSD, previously Deputy Head of the Office for International Affairs in the Ministry of Environment of Brazil. Substantive support has been provided by Dr. Eduardo Calvo, associate professor at the Universidad Nacional Mayor de San Marcos in Lima, Peru and an IPCC Bureau member, and by Sonja Lubecki, research assistant in ICTSD.

I hope that you find this paper to be both an enjoyable read and a valuable resource in your work. Your feedback and ideas are important to us, so please know that you are warmly welcome to contact us at any time.



Ricardo Meléndez-Ortiz  
Chief Executive, ICTSD

## EXECUTIVE SUMMARY

The global effort to address climate change will require substantial action in several policy areas, including the use of a multitude of policy instruments and measures. Trade-related policies are important in this context, given that trade and climate change have several and important interfaces. Understanding how these two issues are intertwined is vital to better comprehend challenges and opportunities of current international negotiations and discussions.

This article identifies four main categories of linkages between trade and climate change. These linkages corroborate the existence of mutual direction and reciprocal influence of the relations between trade, climate change and the policies relating to these issues.

First, climate change physically affects trade in terms of patterns and volume. Potential adverse effects on natural resources and societies can modify countries' productive capacities, thereby altering their comparative advantages and consequently trade patterns and export specializations.

Second, trade has direct and indirect effects on climate change. Direct impacts of trade on climate change exist where trade-related activities have a causal effect on climate change. Depending on which of the scale, composition and technique effects dominates, the net effect can be positive or negative. The scale effect refers to a decline in trade barriers which can affect the environment by increasing the scale of economic activity, leading to increased levels of greenhouse gas (GHG) emissions. Similarly, the composition of economic activity may be influenced by trade reform, as national economies concentrate their activities in sectors in which they have comparative advantages. Finally, the technique effect refers to improvements in the processes of production, for example through cleaner technologies, resulting in reductions of GHG emissions. Indirect effects may occur, for example, when trade creates the right enabling conditions for the promotion of priorities and orientations towards low-carbon growth.

Third, climate change policies can affect trade. Examples of such policies include carbon taxes, border carbon adjustments and the regulation of bunker fuels.

Finally, trade policies can be used for addressing climate change. The removal of trade barriers for climate-friendly goods and services, for instance, can increase their availability, lower their cost and stimulate their diffusion.

The identification of the main types of intersections between trade and climate change suggests that policies addressing these areas can be mutually supportive. Yet, given the complex and cross-cutting character of the trade and climate change linkages and the different institutional settings in which these issues are discussed, the potential for conflict between the two is real.

With the aim of identifying views and perspectives of developing countries on the intersections between trade and climate change in different multilateral processes, three fora were subject to analysis in this paper: the United Nations Conference on Sustainable Development (UNCSD/Rio+20), the United Nations Framework Convention on Climate Change (UNFCCC) and the World Trade Organization (WTO).

Similarly to previous UN meetings in 1972 and 1992, the UNCSD can be a relevant moment to underline the interrelations between trade and climate change. The conference presents an opportunity to address potentials and limitations of the green economy, and to discuss how trade can encourage environmentally sound investments and low-carbon growth in the context of sustainable development.

In the UNCSO process, developing countries express their views on trade and the green economy both in groups and individually. While countries have acted through political alliances like the G77 and China, they have also come together in smaller groups reflecting the regional preparatory meetings, such as the African or Arab Region. In addition, several countries have been vocal individually.

An analysis of the preparatory process leading to Rio+20 suggests that developing countries' positions on trade and the green economy generally revolve around the same main issues: concerns about trade obstacles - such as potential barriers, protectionism and the use of subsidies by developed countries - and calls for technology transfer, capacity building and financing. While many developing countries view the "transition to a green economy" as a trigger for opportunities, including new markets for goods and services with positive or lower environmental impact, their narrative generally reflects a negative approach. This "negative agenda" - usually revolving around concerns about "green protectionism" - often dominates over the "positive agenda" - like new trade opportunities. In this regard, it is key that developing countries foresee attractive benefits and incentives from engaging in international trade of "green" products and services, as there is often a sense of uncertainty *vis-à-vis* the relative and absolute gains that can be derived from this process.

It is argued in this paper that the role trade can play in the transition to a green economy requires further debate. One important contribution Rio+20 could provide in this context relates to the establishment of specific channels to support future discussions on trade and the green economy, generating more knowledge, experience-sharing and informed discussions among countries. It is particularly important that the concerns of developing countries be further addressed in these processes. A possible step forward in this context could be the establishment of an international knowledge-sharing platform to facilitate countries' green economy policy formulation and implementation, a proposal spelled out in the first version of the zero draft outcome document of Rio+20. It is also pertinent to discuss how trade-related aspects of the green economy could be reflected in the eventual establishment of Sustainable Development Goals or in the formulation of a Green Economy Roadmap. Finally, it is argued that initiatives like the proposed Sustainable Energy Trade Agreement could be appropriate in this context, speeding up the development and adoption of renewable energy and clean technology globally.

In the UNFCCC process, trade has appeared on the agenda since the very onset of the Convention. Trade concerns are closely linked to the notion of "common but differentiated responsibility", a key principle in the UNFCCC.<sup>1</sup> Indeed, the asymmetric action this core principle provides for raises concerns that the competitive position of actors in different countries will be altered as some will carry significant levels of carbon costs, whereas others will not. Related to this are concerns that mitigation efforts undertaken by some would be weakened since the polluting activity would thereby move abroad - a phenomenon referred to as carbon leakage. This in turn might prompt certain countries to take action to preserve their competitive position, possibly by using trade-related policies and measures.

This notion that climate change action could involve trade distortions and consequently affect economic development has gained more visibility on the UNFCCC agenda since COP 13 in 2007. Yet, the analysis of this paper indicates that discussions remain inconclusive and to a large extent superficial. This is linked to the fact that no consensus exists on where to address trade in the UNFCCC, and, in fact, whether to do so at all. As a general rule, developing countries are favourable to having such a discussion in the UNFCCC. At COP 17 some progress was made on this front. A decision to create a response measures forum under the UNFCCC was adopted, with general support from developing countries. Trade has been put forward by developing countries

as one important item to be dealt with under this forum, allowing countries to better discuss and articulate their positions on the trade and climate change linkages.

In the UNFCCC, developing countries sometimes act as one group under the G77 and China umbrella. But they also act through other smaller groups, held together by similar interests based on economic, physical or geographical factors. Examples of such groups include the BASIC, AOSIS or OPEC. On trade issues, some countries also act individually.

Within the UNFCCC, the mainstream view of developing countries on trade and climate change is to be strongly opposed to unilateral trade measures. This view is based on the perception that those actions would pass the burden of climate change mitigation onto developing countries. Furthermore, a priority shared by the majority of developing countries is the need for enhanced transfer of technology. In this regard, discussions on technology transfer and Intellectual Property Rights (IPRs) have been conflicting, as many developing countries tend to view IPRs as a possible barrier to access environmentally-sound technologies. The positive role trade can play in the promotion of technology transfer related to climate change mitigation and adaptation has not been explored to its full potential. The extent to which trade can contribute to the diffusion of environmentally-friendly technologies, for example, certainly merits further examination in this context.

At COP 17 in Durban in 2011, Parties agreed to launch a new process through the Durban Platform for Enhanced Action. The process aims at developing a protocol, another legal instrument or a legal outcome under the Convention, applicable to all Parties. While it is not expected that all countries will be required to contribute equally, the decision most certainly paves the way for expectations of increased mitigation action by major emitting countries - developed as well as emerging economies. This will likely have implications for the perception of carbon leakage and competitiveness, referred to above. Indeed, if more countries implement policies to restrict carbon emissions, the risk for carbon leakage would consequently be reduced. However, a broad spectrum of varying levels of carbon prices across the globe will still pose challenges to industries competing internationally. The paper argues that this issue would need to be addressed in order to enhance mitigation action.

In relation to the WTO, the linkages between trade, the environment and sustainable development policies are well established and irreversible. The establishment of the WTO in 1994 came with the creation of the Committee on Trade and Environment (CTE), which acts as a forum for informed debate on how trade and environment measures are connected and to be coordinated to avoid or minimize regulatory conflict. The issue of border carbon adjustments measures has been a sensitive topic in the committee. Developing countries have also raised concerns with regard to discussions on product requirements relating to carbon footprint and standard-setting. Moreover, developing countries have expressed demands for technical assistance as well as for technology diffusion and transfer. Despite its limitations, the CTE provides a useful tool for governments to achieve a more coordinated approach on issues related to trade and climate change. This paper therefore recommends that member states strive to optimize the work of the CTE with regards to climate change.

The Doha Ministerial Conference in 2001 mandated the CTE to launch specific negotiations on trade and environment, including the improving of market access for environmental goods and services (EGS). Over the years, negotiations proved however contentious, much due to the north-south divide over reaching an agreement on a theoretical and foundational methodology (project, list and offer approach) on what product or tariff line would qualify as tariff or non-tariff barrier elimination or reductions. Developing countries pushed for making technology sharing and transfer priority elements of the market access negotiations. While discussions have resulted in some progress, they are now being held hostage to the stalemate of the Doha Development Agenda (DDA).

In the WTO, developing countries are less inclined to join in large alliances when discussing climate change. The alliances predominant in the UN system do not have a strong presence in the WTO. Instead, this paper shows that developing countries sometimes share interests with developed countries, refuting reductionist analysis that tend to set developing countries and developed countries in opposite extremities from the start.

In spite of the trade and climate change mandates of the three examined fora - the UNCSO, UNFCCC and WTO - there has so far been no real progress in making decisions that would allow trade to significantly contribute to climate change action. A more defensive trade agenda, related to the risk that climate change action will impair trade, is present over the three negotiation processes. Although the fora have - to varying degrees - mandates to deal with trade and climate change, there is a wide-spread perception that no forum really attends to the issues at stake. The bouncing of trade and climate issues between fora has to some degree prevented a substantive discussion in all. This analysis therefore recommends that it may be useful for developed countries in particular to engage in discussions when and where this is being requested by developing countries, such as the response measures forum, even if it is not the setting preferred by developed countries.

The findings of this paper show that when discussions on trade and climate change do take place, it allows for countries, including developing countries, to better articulate their positions. A more nuanced articulation of views and positions is crucial given that it would necessarily be based on a better understanding of the individual needs and concerns of the domestic economies, thereby allowing individual countries to prepare better policy responses. In addition, it can contribute to mitigating fears and concerns that may be overly emphasized due to a lack of access to facts and analysis. Moreover, if countries achieve a deeper understanding of their own concerns, this may allow them to engage in constructive alliances reflecting common interests. A strong polarization between, typically developed and developing countries, is likely not helpful in the context of climate change. Different countries have too differing interests, depending on the structure of their economies, the physical and economic vulnerability to climate change and related policies, the contribution to global emissions and hence abatement opportunities, as well as external pressure to take mitigation action.

In addition to the processes analyzed in this paper, it is crucial that countries engage in discussions about trade and climate change in smaller, ad hoc groupings. Indeed, multilateral progress must be preceded by bridge-building dialogue and the seeking of compromises between key countries. Therefore, it is recommended that a constructive dialogue be held in particular between progressive developed countries and some of the developing economies that are key for climate change mitigation and that give strong priority to trade issues. Similarly, developed countries could engage in discussions with key emitters among the emerging economies about the "positive" agenda of allowing for trade to contribute to climate change action.

## 1. INTRODUCTION

Trade, climate change and the policies addressing these areas have several important interfaces and linkages. Whereas discussions about these issues are deemed to be complex and located in multiple fora, it is pertinent to consider their intersections with views of highlighting existing opportunities and challenges at international and national levels.

This paper has a twofold objective. First, it briefly explores relevant interfaces between trade and climate change in the context of sustainable development. Understanding how these issues are intertwined and influenced one by another is particularly relevant in order to better comprehend the shaded areas and intersections of current international negotiations and discussions. Second, it provides a systematic overview and analysis of developing countries' positions concerning trade and climate change negotiations and debates.<sup>2</sup> Beyond the recognition of positions and interests of developing countries, it seeks to identify main country groupings, the establishment of political alliances and the convergence or divergence of positions across three multilateral processes: the United Nations Conference on Sustainable Development (UNCSD/Rio+20), (ii) the United Nations Framework Convention on Climate Change (UNFCCC), and (iii) the World Trade Organization (WTO).

The document is structured in six parts. The *first chapter* briefly introduces some of the linkages between trade and climate change, outlining their cross-cutting nature. The *second chapter* focuses on the UNCSD and how developing countries are articulating their positions on trade and the green economy - one of the main topics of the conference. The *third chapter* identifies developing countries' core positions in the context of the UNFCCC negotiations, pointing out similarities and contrasts with a focus on trade issues. The *fifth chapter* explores developing countries' positions within the WTO, indicating to what extent they have common or divergent points

related to climate change aspects. The *sixth chapter* summarizes findings and conclusions of the analysis of the aforementioned fora. It also includes recommendations with the aim of unlocking synergetic potentials between the different processes.

This research deals with trade-related aspects of climate change and the green economy. In the right enabling conditions trade can, indeed, offer potential benefits in relation to addressing climate change and supporting a transition towards a green economy. At the same time, trade can be affected by climate change and related policies.

By identifying developing countries' perspectives on the interrelated issues of trade and climate change, this research therefore aims to identify opportunities and challenges for the trade and climate change interface. This serves to make recommendations for how the different negotiating processes can create the right enabling conditions for trade to positively contribute to climate change action, and for reducing the risks that trade is unnecessarily impaired, thereby hampering its role in contributing to growth and development.

A few caveats are imperative in this context. First, there is not necessarily a north-south division in all the instances or subjects related to the mentioned fora. The formulation of political alliances at the intersections of trade and climate change does not always correspond to the countries' level of development. Instead, alliances also reflect other influences and collaborative strategies, such the existence of economic or political unions. Second, countries might simultaneously participate in different country groupings, but finally associate themselves to a particular alliance. Third, importantly, developing countries are not a homogenous or static whole. They have specific interests and distinct domestic dynamics which have to be taken in account at different fora and at different times. Fourth, there is not a common or universal definition of

what a “developing country” is, being subject to distinct definitions in different fora. In this regard, one country might be considered a developed country in one forum but does not fall under the same category in the other. Finally, due to space constraints, this paper does not provide a fully-comprehensive or exhaustive overview of individual country positions, but rather a selection of core positions. Also, it focuses on most recent views of developing countries, not being meant to provide a broad historical analysis.

Some particularly useful definitions of notions and concepts that are used throughout the paper are discussed in Box 1. These definitions are intended to provide further clarification on the understanding of those notions and concepts for the purposes of this paper, acknowledging however their polysemous character and the different interpretations they are subject to. The definitions are merely methodological and not intended to bound discussions to a narrow, limited or excluding approach to these concepts and notions.

### Box 1: Definitions of main concepts and notions

**(i) Developing countries:** There is not a common or standard definition for the category of developing countries in the UNCSD, UNFCCC and WTO fora. The UNCSD process makes a general reference to developing countries but does not apply an exact definition. In the WTO, members describe themselves as developed or developing countries. About two thirds of the WTO’s 157 members are considered developing countries, with some of them being recognized as least developed countries (LDCs). However, other members can question the decision of a member to make use of the developing countries provisions. In the UNFCCC, developed countries are listed in Annexes I and II of the Convention. All other countries are considered developing countries.

**(ii) Environment:** The environment is broadly understood as the biological and physical setting that humans live in and interact with. Humans depend on their environment for critical resources - from renewable and non-renewable raw materials to ecosystem services and the atmosphere - and affect the environment in numerous ways through their activities. In this regard, the environmental sustainability dimension and the environmental pillar of sustainable development are particularly relevant. Environmental sustainability implies, *inter alia*, the ability of the environment to continue functioning in the long-term by maintaining its productivity and diversity.

**(iii) Climate change:** The UNFCCC, in Article 1 of its Convention, defines climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”.<sup>3</sup> For the purposes of this study, climate change is also linked to the discussions of low-carbon patterns of growth, and associated with a minimal output of greenhouse gas (GHG) emissions into the atmosphere.

**(iv) Green economy:** A green economy can be defined as one that “results in improved human wellbeing and social equity, while significantly reducing environmental risks and ecological scarcities. A green economy is characterized by substantially increased investments in economic sectors that build on and enhance the earth’s natural capital or reduce ecological scarcities and environmental risks. These sectors include renewable energy, low-carbon transport, energy-efficient buildings, clean technologies, improved waste management, improved freshwater provision, sustainable agriculture, forestry, and fisheries. These investments are driven by, or supported by, national policy reforms and the development of international policy and market infrastructure”.<sup>4</sup> Climate change is therefore one aspect of the bigger concept of the green economy. Green economy is also used here as a proxy for other concepts, like low-carbon economy and green growth.



## 2. THE INTERRELATIONS BETWEEN TRADE AND CLIMATE CHANGE

The interconnections between trade and climate change are subject to a growing amount of research. Generally, the issues surrounding trade and climate change have often been dealt with separately at independent fora and processes. However, they have a cross-cutting nature that requires approaching them with a broader perspective that combines the two

issues of trade and climate change into one interlinked category.

It is possible to identify four main categories of linkages between trade and climate change (see Box 2).<sup>5</sup> These linkages corroborate the existence of mutual direction and reciprocal influence of the relations between trade, climate change and the policies relating to these issues.

### Box 2: Main trade and climate change linkages

- 1) Climate change physically affects trade (in terms of patterns and volume);
- 2) Trade affects climate change, both directly and indirectly;
- 3) Climate change policies affect trade;
- 4) Trade policies as a mechanism to address climate change and promote low-carbon growth.

The first category concerns the biophysical effects of climate change on trade. It is based on the understanding that potential adverse effects on natural resources and societies can modify countries' productive capacities, affecting their comparative advantages and consequently trade patterns and export specializations. Increases in intensity and occurrence of extreme weather events related to climate change and natural variabilities threaten the physical integrity and proper functioning of the infrastructure needed for trade to thrive. In this sense, climate change will affect trade as countries react, adapt and adjust to the current or potential impacts of climate change. The agricultural sector, for example, will be particularly affected by climate change, raising food security and economic development concerns for many countries, especially in the developing world.

The second category of linkages relates to the direct and indirect effects of trade on climate change. Direct impacts of trade on climate change exist where trade-related activities have a causal effect on climate change, which can be positive or negative. To understand this relationship, it is useful to recall what the trade-environment literature refers to as scale, composition and technique effects.<sup>6</sup>

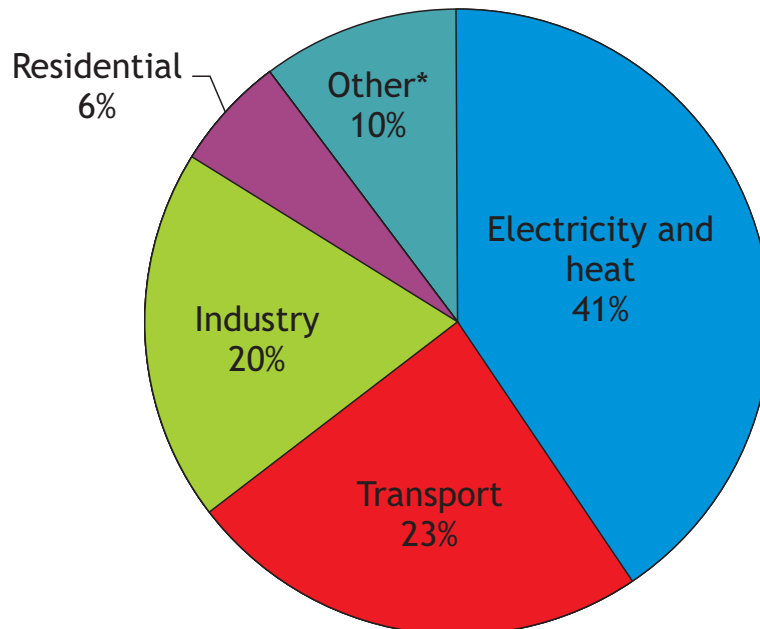
First, a decline in trade barriers can affect the environment by increasing the scale of economic activity, leading to increased levels of GHG emissions as a result of new opportunities for exchanging goods and services. Second, trade liberalization may influence the composition of economic activity in a given country once national economies concentrate their activities in sectors in which they have comparative advantages. Depending on the nature of their production, countries might become more or less GHG-intensive. Finally, the technique effect refers to improvements in the processes of production, for example through cleaner technologies, resulting in reductions of GHG emissions. The technique effect represents one of the main opportunities related to climate change mitigation.

For example, estimates from the International Energy Agency (IEA) indicate that the combined share of electricity and heat generation, together with transport, represented nearly two-thirds of global CO<sub>2</sub> emissions in 2009 (see Figure 1).<sup>7</sup> Trade can contribute to the mitigation of climate change by promoting the exchange of sustainable energy goods and services - SEGs<sup>8</sup> - which are less GHG-intensive. Moreover, trade can allow for energy intensive production to be concentrated

in countries with an abundant access to clean energy, thereby reducing GHG emissions related to it. At the same time, transport - a critical

element of trade and one of the main drivers of human-induced climate change - is also responsible for rising GHG emissions.<sup>9</sup>

**Figure 1: World CO<sub>2</sub> Emissions by sector in 2009**



\*"Other" includes commercial/public services, agriculture/forestry, fishing, energy industries other than electricity and heat generation, and other emissions not specified elsewhere.

Source: International Energy Agency (IEA), *CO<sub>2</sub> Emissions from Fuel Combustion: Highlights*, 2011.

Indirect effects of trade on climate change are also part of the bigger picture. Trade-induced growth may help create better conditions for governments to implement policies related to sustainable development, and it can positively influence policy priorities and orientations towards low-carbon growth.

The third category covers climate change policies affecting trade. A wide range of policies has been developed to address climate change but can potentially have impacts on trade. Examples of those policies are carbon taxes, emission trading schemes, border carbon adjustments, government support for low GHG emitting technologies and clean energy, for instance, in the form of subsidies, technical requirements, standards and labelling schemes, as well as the regulations of bunker fuels.

The fourth category of linkages refers to the use of trade policies for climate change adaptation and mitigation. It involves, for example, the reduction or removal of trade barriers for climate-friendly goods and services, hence

increasing the availability, lowering the cost and stimulating the diffusion of such goods and services. In addition to capacity-building, this can strengthen the ability of countries to mitigate and adapt to climate change. Trade policies can also involve intellectual property rights (IPRs) to provide incentives for investments in research and development of new technologies. For technology recipients, IPRs may however have undesirable effects, such as increased costs of acquisition of climate-friendly technologies.

The identification of the main types of intersections between trade and climate change suggests that policies addressing these areas can be mutually supportive. However, there also exists potential for conflict between the two. Given the complex and cross-cutting character of the trade and climate change linkages, and the different institutional settings in which those issues are discussed, possible solutions are not simple or easily achieved. Despite the challenges, handling trade and climate change issues in an isolated and fragmented manner involves opportunity costs. Therefore, discussions about

a more effective and efficient global response to climate change should consider the role played by international trade.

While the establishment of synergies between international policies addressing trade on the one hand and climate change on the other is needed, the challenge of finding common ground walks *pari passu* with the acknowledgement of the autonomy and independence of distinct fora where discussions on trade or climate change

are taking place. In this regard, it is important to identify particularities, similarities and contrasts between trade and climate change in the WTO and UNFCCC processes. In this context, it is also essential to think about how they can be supported by other fora, such as the Rio+20 Conference. The next chapters provide a reflection on the current state of play of the international negotiations on trade and climate change, focusing on developing countries' positions on these issues.

### 3. ISSUES AT THE INTERSECTION OF TRADE AND CLIMATE CHANGE IN THE UNCSD (RIO+20) PROCESS

The United Nations Conference on Sustainable Development (UNCSD), to be held from 20 to 22 June 2012 in Rio de Janeiro, Brazil, will encompass important discussions on issues at the intersection of trade and climate change. Among the subjects to be considered during Rio+20, two are particularly important for the purposes of this paper: (i) renewing political commitment to sustainable development, assessing the progress to date and the remaining gaps; (ii) the transition to a green economy in the context of sustainable development and poverty eradication.

The above-mentioned elements will be further discussed in this chapter, divided in four parts. The first subsection briefly indicates how discussions on trade and environment were dealt with in previous relevant UN meetings, reflecting their increasing importance over the last decades. The following sections approach the discussions on trade and the green economy within the Rio+20 process and identify what the main synergic potentials are that the conference might unlock on this issue.

#### 3.1 Trade and Sustainable Development on the Road to Rio+20

One of the expected outcomes from Rio+20 is to renew international political commitment to sustainable development, assessing progress and drawbacks over time and reaffirming Stockholm 1972 and Rio 1992 propositions and principles. Similarly to the two precedent UN conferences, the Rio+20 Conference can be a relevant moment to underline the interrelationships between development, international trade and the environment, also identifying forward-looking solutions and mutual gains for developed and developing countries.

The United Nations Conference on the Human Environment (Stockholm 1972) was a milestone of modern political and public awareness of global environmental problems. In fact, it also touched upon trade and environmental issues

by acknowledging the need to take further steps to guarantee, *inter alia*, that environmental policy measures would not be used as a pretext for discriminatory trade policies.<sup>10</sup>

Mandate was given to the UN system in 1972 to assist - in cooperation with other governmental and non-governmental agencies - governments in developing mutually acceptable common international environmental standards on products governments consider to be of significance in international trade.<sup>11</sup> In this sense, testing and certification procedures designed to ensure that the products conform to these international standards should also avoid arbitrary and discriminatory actions that could have negative impacts on the trade of developing countries.

Despite the progress made in Stockholm in 1972, many problems appeared in following the recommendations adopted. The UN's mandate was not always translated into effective action and many difficulties emerged at the international level, such as the secondary level of priority given to environmental issues under the auspices of the General Agreement on Tariffs and Trade (GATT). In general, there has been an implementation gap in relation to the results achieved in Stockholm 1972.

Twenty years after the Stockholm Conference, the United Nations Conference on Environment and Development (Rio 1992) took place in Rio de Janeiro, Brazil. Strongly influenced by the report "Our Common Future",<sup>12</sup> which coined the concept of sustainable development, Rio 1992 resulted in concrete outcomes, including the Rio Declaration on Environment and Development, Agenda 21 and the Forest Principles.<sup>13</sup> Principles 12 and 16 of the Rio Declaration on Environment and Development focused directly on trade and environment:

States should cooperate to promote a supportive and open international economic system that would lead to economic

growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus (Principle 12, Rio Declaration on Environment and Development).

National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment (Principle 16, Rio Declaration on Environment and Development).

The issue of trade and environment was also part of Agenda 21 through specific programme areas. The programme “Promoting sustainable development through trade” had the objective to “promote an open, non-discriminatory and equitable multilateral trading system [to] enable all countries - in particular developing countries - to improve their economic structures and the standard of living of their populations through sustained economic development”. Furthermore, the programme intended to “improve access to markets for exports of developing countries”. Programme activities included international and regional cooperation and coordination, seeking the “[promotion of] an international trading system that takes account of the needs of developing countries”.<sup>14</sup>

Rio 1992 also stressed the importance of multilateral fora like GATT, the United Nations Conference on Trade and Development (UNCTAD) and other international organizations. The conference further pointed to the need to

clarify the roles these organizations have in dealing with trade and environment-related issues, including, where relevant, conciliation procedures and dispute settlement. As a result of the conference, governments should encourage international and regional economic institutions to examine, in accordance with their respective mandates and competences, propositions and principles related to trade and environment. Some of the main issues addressed by Agenda 21 are further highlighted in Annex II.

Although Agenda 21 might have helped forge a better understanding of the relationship between trade and environment, and the importance of a multiscale response to environmental degradation (local, national, international), the adoption of principles and provisions in relation to trade and environment coexisted with limited practical implementation results.

The World Summit on Sustainable Development (WSSD) or Rio+10 took place in 2002, in Johannesburg, South Africa, with limited results. The main output of the conference was the Johannesburg Plan of Implementation, in which trade was particularly addressed in two sections (chapter 5 on “Sustainable development in a globalizing world” and chapter 10 on “Means of implementation”). Even though the links between trade and sustainable development were subject to consideration in Rio+10, there were narrow practical implementation outcomes in the years that followed the meeting.

The conferences of Stockholm 1972, Rio 1992 and Johannesburg 2002 reflected the particular social, economic and environmental international contexts in which they were embedded. Despite their particularities, the conferences succeeded to some extent in highlighting the need to increasingly draw international attention to the interfaces of trade and sustainable development. However, at the same time they also missed opportunities to bring light to those interlinkages in a more concrete and results-oriented manner.

Although Rio+20 has a limited mandate on trade and climate change related issues, the conference has the opportunity to contribute by addressing potentials and limitations of the green economy, and by discussing how trade can encourage environmentally sound investments and low-carbon growth.

The primary negotiations on the outcome document of Rio+20 - currently the zero-draft version<sup>15</sup> - reaffirms the outcomes of the previous environmental conferences (such as Agenda 21 and the Johannesburg Plan of Implementation) and calls for greater emphasis in addressing the implementation gaps. The zero-draft also contains important language on trade, climate change and energy, indicating that the outcome document of the conference will mention these key issues of the international agenda.

### **3.2 The Green Economy in the Context of Sustainable Development and Poverty Eradication**

Among the subjects to be considered during Rio+20, a particularly important one is the “green economy in the context of sustainable development and poverty eradication”. Rio+20 is deemed to build up political momentum to support a better understanding of the concept of green economy and its practical applications worldwide. It can also represent an opportunity for further discussing how trade can be a supporting element to promote the green economy.

#### **Emergence of the green economy concept**

The preparatory process for the Rio+20 Conference has been relevant in providing further conceptual clarification and empirical reflections on the green economy. The concept has emerged in international debates over the last few years with particular support from the United Nations Environmental Programme (UNEP). Often accompanied by other terms such as “green growth” and “green jobs”, and calling for the adoption of a “global green new deal”,<sup>16</sup> the green economy suggests the need for integrated responses to the multiple crises, for example the economic crisis and the climate crisis, currently faced by the world.

Despite the existence of multiple definitions, the green economy stresses the economic perspective of sustainability, or the “intersection between environment and economy”.<sup>17</sup> According to UNEP, the green economy recognizes that economic growth and environmental sustainability can be complementary strategies, thus supporting the view that there are significant mutual gains between these two objectives.<sup>18</sup>

#### **Trade and the green economy**

Trade is a contentious issue in the context of green economy debates, particularly for developing countries. The preparatory process leading to Rio+20 has highlighted important concerns from developing countries on the nature of the trade-related impacts of the green economy.

First, there is a general concern that the green economy might generate protectionist measures or restrictions on international trade under the argument that a good or service does not comply with “green” parameters. In this sense, developing countries fear that the green economy would be used to justify trade restrictions, leading to “green protectionism”. Second, developing countries often demonstrate a preoccupation with the competitiveness of their countries in relation to the trade of goods and services in the context of the green economy. In other words, developing countries do not want to be deprived from a full and beneficial participation in the global green economy. Furthermore, there is a concern that the green economy is used to impose new conditionalities on developing countries, related for example to international cooperation or Official Development Assistance (ODA).<sup>19</sup>

Therefore, green economy discussions frequently raise concerns from developing countries about typical trade obstacles, such as potential barriers, protectionism and the use of subsidies by developed countries. Some of the potential risks that developing countries associate with the green economy in relation to the trade regime are summarized in Box 3.<sup>20</sup>

**Box 3: Green economy, trade and perceived risks by developing countries**

- Using environmental measures for trade protection;
- Gaining market access through the guise of environmental reasons;
- Facing production that is subsidized in the industrialized world without being able to impose corrective measures;
- Limiting the policy space that developing countries have to promote their own green economy sectors;
- Facing technical standards that developing country exporters cannot meet;
- Imposing new conditionality on developing countries for aid, loans, and debt rescheduling or debt relief.

At the same time, many developing countries view the transition to a green economy as a trigger for opportunities, such as new markets for goods and services with positive or lower negative environmental impacts. Indeed, there are positive estimates for a significant expansion of the global market in low-carbon and energy efficient technologies in the current decade. Combined with growing demand from industry and consumers, this market is deemed to nearly triple from current USD 800 billion to USD 2.2 trillion in 2020, a global annual market growth of 11 per cent from 2010-2020.<sup>21</sup>

Trade and investment can be an important channel for the diffusion of environmental goods and services (EGS), one of the main issues of the green economy. From a trade policy perspective, the promotion of EGS could be carried out by reducing tariff and non-tariff barriers to such goods and services.<sup>22</sup> However, many developing countries are concerned about the conditions involving tariff reduction or elimination, arguing *inter alia* that developed countries would benefit the most from such measures.

Other key initiatives are being discussed in the Rio+20 preparatory process, such as the proposal to agree by 2015 on a set of Sustainable Development Goals (SDGs). These would assess progress against a range of socio-economic and environmental objectives, possibly building on the Millennium Development Goals for the post-2015 period. Furthermore, countries have been engaging in conversations over a

Sustainable Energy Trade Agreement aimed at enabling the rapid scale up in innovation and diffusion of technologies in the non-fossil fuel energy sector.

The next section presents some of the perceptions of developing countries on trade and the green economy to illustrate common positions, challenges and unsolved issues. For the purposes of this paper, the focus is not on the green economy *per se*, but on its interactions with trade.

### **3.3 Developing Countries' Positions on Trade and the Green Economy**

During the preparatory process leading up to Rio+20, countries have expressed their views on a wide range of issues related to the green economy, with neither trade nor climate change having emerged as the main issues of attention. Nevertheless, it is possible to identify some developing country perspectives on trade and climate change, or the environment more generally.

#### **G77 and China**

The G77 was formed at the occasion of the establishment of UNCTAD in 1964, when southern countries were devising strategies for rapid social and economic development in light of their recent independence. These countries had inherited economies which were generally based on raw materials and other

primary production, hence suffering from poor terms of trade. The solidarity block of the Group of 77 and China has been described as being kept together by a sense of exclusion from world affairs.<sup>23</sup>

In environmental negotiations, the group consistently argues for five specific interests: the imperative to link environment and development; the need for more financial resources for environmental programmes; the transfer of technology; the need for capacity building for both negotiations and for policy implementation; and longer time horizons for implementation of new regulations.<sup>24</sup>

In the context of the Rio+20 process, the G77 and China have touched upon the trade and climate change interface through comments related to unilateral trade measures and market access:

Any discussion on the Rio Conference in relation to ‘green economy in the context of sustainable development and poverty eradication’ should not resort to any form of protectionism, unilateral measures or other border trade measures; should allow for expanded market access for products from developing countries and address trade-distortive measures [...] In this regard, we express serious concern regarding subsidies by many developed countries.<sup>25</sup>

Technology transfer is another focus of the G77 and China. In the same submission, the group has underlined the importance of the transfer of environmentally sound technologies to developing countries, calling for the removal of barriers to technology transfers. However, at the same time, the group recognizes the need to provide fair incentives for innovation.

In the context of technology transfer, the group also made specific reference to renewable energies and low-emission technologies by expressing their support for domestic policies and strategies to increase, amongst others, the use of renewable energy sources and low-emission technologies, which could be supported by the transfer of appropriate,

affordable and sustainable energy technologies to developing countries.<sup>26</sup>

### **China**

China has addressed the interface of trade and the green economy by emphasizing the need for developed countries to promote trade liberalization, as well as the need to set and implement trade policies that encourage the transition to a green economy. In this context, China manifested concerns over trade protectionism under the pretext of environmental protection. Indeed, China is strongly opposed to any forms of “green barriers” that the green economy might entail.<sup>27</sup>

China has also stressed that developed countries need to provide adequate support to developing ones in terms of technology transfer, capacity building, market access and financial assistance to promote the green economy.<sup>28</sup>

### **India**

India has expressed concerns that the green economy should not lead to “green protectionism” through, for example, unjustified or unilateral trade restrictions or green labeling. For India, the green economy should not cause market distortions by favouring specific types of production processes or technologies, given that this would put developing countries in a position of unfair disadvantages. Furthermore, the multilateral trading system should facilitate technology transfer to support countries to move towards a green economy. Financial and technical assistance for the transition to the green economy is also a core concern for India.<sup>29</sup>

### **Bolivia**

Bolivia shares the concerns of most developing countries regarding unilateral trade measures and technology transfer in the context of the green economy. However, the country stands out through the more extreme articulation of its views. In this regard, Bolivia’s position



on the use of market mechanisms for climate change mitigation is particularly noteworthy. In a proposal to the UNCSO in October 2011, Bolivia called for the “[elimination of] carbon market mechanisms and offsets so that real domestic reductions are made within the countries with said obligations”.<sup>30</sup>

In the same proposal, Bolivia also stressed the importance of creating an effective Technology Transfer Mechanism that reflects developing countries’ demand for technologies that are “socially, culturally and environmentally appropriate”. Bolivia goes further by calling for the removal of intellectual property barriers to allow a true transfer of environmentally sound technologies to developing countries.

#### Venezuela

Similar to Bolivia, Venezuela stands out in the Rio+20 process through its strong language with regard to unilateral trade measures. Venezuela does not talk about the green economy, but the “ecologic economy”, and has stressed that “[the ecologic economy] should exhaustively prevent the adoption of restrictive measures that result in ‘green protectionism’”.<sup>31</sup> This reflects Venezuela’s concern that measures supposedly used for environmental purposes effectively constitute trade barriers.

On the issue of technology transfer, Venezuela has been vocal in demanding the removal of barriers to enable and enhance the transfer of environmentally sound technologies to developing countries. According to this country, Rio+20 should, *inter alia*, lead to the promotion of the transfer of advanced technologies, including cleaner technologies in order to support developing countries in the development of renewable energies.<sup>32</sup>

#### Brazil

Brazil attaches great importance to the issue of technology transfer in the context of sustainable development, considering such transfers crucial for climate change mitigation. In its submission to the preparatory process for the Rio+20 Conference, Brazil,

while recognizing that intellectual property is crucial for technological innovation, points out that IPRs can prevent the dissemination and transfer of clean and other advanced technologies. Therefore, Brazil stresses that proposals for “patent pools” or for funding clean technology transfers need to be discussed at Rio+20 given the opportunities they offer.<sup>33</sup>

While Brazil is also concerned about the use of trade measures on environmental grounds, its view is less defensive than those of countries like Bolivia or Venezuela. In the above-mentioned submission, Brazil simply stated that “caution should be taken in adopting environmentally-based trade measures, given their potential use as protectionist instruments, in particular against the exports of developing countries”.

#### Argentina

For Argentina, environment-related trade measures and “green protectionism” have emerged as key issues in the Rio+20 process.

In its submission on inputs for the Rio+20 outcome document,<sup>34</sup> Argentina underlined the importance of ensuring that environmental measures are compatible with WTO rules. “Policies promoting a ‘green protectionism’, which is reflected in disguised restrictions on international trade or arbitrary or unjustifiable discrimination that are incompatible with the multilateral trading system should not be encouraged”.

Argentina argues that by applying environmental measures to developing country exports, the burden of implementing environmental obligations shifts from developed to developing countries. Indeed, Argentina considers such trade measures as non-tariff trade barriers that must be discouraged. Environmental measures like carbon footprint schemes and carbon emission taxes currently in place in many developed countries serve, according to Argentina, the economic interest of the countries applying them. Argentina believes that contrary to the use of environment-

related trade measures that create barriers, the environmental challenges require a supportive and open economic system that allows for economic growth and sustainable development in all countries.

In the same submission, Argentina further calls upon developed countries to abandon subsidies that have negative environmental consequences given the harm such protectionist measures pose for the environment, as well as for the development of developing countries.

Moreover, Argentina has identified technology transfer to developing countries as a priority. Such transfers are for example crucial for the enhanced utilization of clean energy sources. In the context of technology transfer, Argentina stresses the need to think about the role of IPRs given that they act to prevent effective technology transfer.

#### Arab Region

During the Arab Regional Preparatory Meeting for Rio+20, the Arab states reaffirmed the view that the green economy shall not serve as “a pretext to create trade barriers and environmental standards that are difficult to implement”.<sup>35</sup> Given the strong reliance of many Arab countries on oil and gas exports, the concern over environmental standards acting as trade barriers is particularly severe for this region.

In addition to this concern, the Arab states have called upon developed countries to meet their commitments *vis-à-vis* the developing countries, including technology transfer and provision of capacity building to support sustainable development processes in the region.

#### African Region

The African region faces numerous development challenges and is also the region which is particularly affected by adverse environmental impacts, as well as the global financial and economic crisis, despite its low contribution

to these problems. In this context, the African states, during the African Regional Preparatory Conference for Rio+20, reiterated “that the green economy should not be used as a trade barrier”.<sup>36</sup> They have stressed that all countries, especially developed countries, should refrain from implementing unilateral measures for environmental purposes.

Similarly, at the fourth special session of the African Ministerial Conference on the Environment, held in September 2011, the African countries stressed, *inter alia*, that the green economy should not be used as a justification for the creation of new trade barriers. The African countries further called upon developed countries to support green development initiatives, including the removal of barriers to trade.<sup>37</sup>

In the outcome document of their regional preparatory meeting, the African states further called for technology transfer and capacity-building support by Annex I countries for non-Annex I countries generally, and African countries in particular, to help them face the adverse effects of climate change.<sup>38</sup>

### 3.4 Analysis and Recommendations

An analysis of the PrepComs<sup>39</sup> and other preparatory processes at international, regional and national levels on the way to Rio+20 suggests that developing countries’ positions on trade and the green economy generally revolve around the same main issues: concerns about or opposition to unilateral trade measures and green protectionism, and calls for technology transfer, capacity building and financing. While developing countries’ positions on trade in the context of the green economy are not diverse, differences exist regarding the intensity with which they articulate their views on these issues. Bolivia and Venezuela are particularly outstanding in this regard, with their views on “green trade barriers” forming the most extreme positions, while Brazil, for example, is less defensive in its views.

While discussions on the way to Rio+20 have shed light on best practices and on the economic, environmental and social aspects of the green economy, the role that trade can play in the transition to a green economy requires further debate.

It seems particularly important at this stage to better identify which role trade has to play in supporting a green economy from the perspective of developing countries. A more comprehensive identification of opportunities for developing countries with regard to trade and the green economy is essential, including a better knowledge of their capacity-building requirements and technology transfer needs. As outlined above, it seems key that developing countries foresee attractive benefits and incentives from engaging in international trade of “green” products and services, as there is often a sense of uncertainty in relation to the relative and absolute gains that can be derived from this process.

The Rio+20 process on trade and the green economy quite often reflects a “negative agenda”, with the narrative of developing countries - such as “green protectionism” dominating over the “positive agenda” - like new trade opportunities. This can be due to an insufficient understanding about the real magnitude of the trade impacts of the green economy on developing countries at this point. This in turn can be explained by the situation that Rio+20 does not have a concrete mandate on trade-related issues. In this sense, considerations on what the green economy should not look like have sometimes prevailed over more elaborated proposals on possible ways forward.

Nevertheless, there are also windows of opportunity for Rio+20 to support the interface of trade and the green economy. One important contribution that could result from Rio+20 relates to the establishment of specific channels to support future discussions on trade and the green economy, generating more knowledge, experience-sharing and informed discussions among countries, where

the concerns of developing countries could be further addressed.

Some proposals have already been mentioned in the preparatory process and could be further discussed during the conference: (i) the establishment of a forum for international cooperation on trade-related green economy issues, providing regular consultation and information exchange between countries and other stakeholders; (ii) a demand-driven technical assistance programme that responds to the increasing demand for green economy capacity building, enhancing productive capacities in green sectors of national and regional interest.<sup>40</sup> If well articulated, these proposals might be of interest to a broad range of developing countries, as many of them have emphasized the need to promote the exchange of experiences, best practices, capacity building and technology transfer.

One issue which possibly represents a “low hanging fruit” is the potential support Rio+20 could provide to the establishment of an international knowledge-sharing platform to facilitate countries’ green economy policy formulation and implementation, a proposal spelled out in the first version of the zero draft outcome document of Rio+20. This platform might be a “menu of policy options, a toolbox of good practices in applying green economy policies at regional, national and local levels, a set of indicators to measure progress, and a directory of technical services, technology and financing that could assist developing countries”.<sup>41</sup> In addition, such a platform could also encompass a set of general guidelines and best practices with respect to trade as an enabling element of the green economy. This platform could also promote synergies with other existing fora and initiatives that already address green economy perspectives and challenges, such as the Green Growth Knowledge Platform (GGKP).<sup>42</sup>

Finally, it is relevant to reason how trade-related aspects of the green economy could be reflected in the eventual establishment of SDGs or in the formulation of a Green Economy

Roadmap, topics also being discussed in the process leading to Rio+20. Therefore, if the UNCSD calls for the establishment of SDGs, or if it backs up a Green Economy Roadmap, those could be valuable opportunities for mainstreaming the trade dimension while

formulating specific objectives and targets. A Sustainable Energy Trade Agreement (SETA) could also be an appropriate initiative in this context, speeding up the development and adoption of renewable energy and clean technology globally.

## 4. ISSUES AT THE INTERSECTION OF TRADE AND CLIMATE CHANGE IN THE UNFCCC NEGOTIATIONS

The United Nations Framework Convention on Climate Change came into force in 1994 with the mandate to achieve “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”.<sup>43</sup> This section explores the relations between climate change and trade issues since the onset of climate change negotiations, placing emphasis on developing countries’ positions.<sup>44</sup> In addition, the chapter intends to analyze how trade and climate change discussions have evolved in the UNFCCC process.

### 4.1 Trade in the United Nations Framework Convention on Climate Change

A key principle of the UNFCCC is the notion of “common but differentiated responsibility”.<sup>45</sup> Often evoked by developing countries alongside the negotiation process involving different issues, this principle is at the heart of some of the most complex discussions in relation to climate change action. Indeed, the asymmetric action it provides for raises concerns that the competitive position of actors in different countries will be altered as some will have to carry significant levels of carbon costs, whereas others will not. This in turn might prompt certain countries to take action to preserve their competitive position, possibly by using trade-related policies and measures.

Trade concerns have consequently appeared since the very onset of the Intergovernmental Negotiation Committee that negotiated the UNFCCC. This is mainly reflected in the following Convention Article 3, paragraph 5:

The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. Measures

taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.<sup>46</sup>

### 4.2 The Kyoto Protocol: Trade Discussions on Response Measures and Economic Diversification

The only legally binding instrument to have so far resulted from the UNFCCC is the Kyoto Protocol. It was adopted in 1997 and entered into force in 2005, with its first commitment period from 2008-2012. The second commitment period was agreed to start by 1 January 2013, ending in 2017 or 2020. The emission reduction targets for the second commitment period will be decided during COP 18/MOP8. However, some developed countries already communicated that they will not take part in any mitigation efforts under the Kyoto Protocol.

In line with the principle of common but differentiated responsibility, developed countries listed in Annex I of the Convention, so-called Annex I countries, and which are signatories to the Protocol, are bound during the first commitment period to reduce their GHG emissions by 5.2% compared to their 1990 levels, whereas there are no such requirements for developing, or “non-Annex I” countries.

The Kyoto Protocol considers trade, both explicitly and implicitly, in the following Articles:

2.3 The Parties included in Annex I shall strive to implement policies and measures under this Article in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties and in particular those identified in Article 4, paragraphs 8 and 9, of the Convention, taking into account Article 3 of the Convention. [...]<sup>47</sup>

3.14 Each Party included in Annex I shall strive to implement the commitments mentioned in paragraph 1 above in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention. In line with relevant decisions of the Conference of the Parties on the implementation of those paragraphs, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, consider what actions are necessary to minimize the adverse effects of climate change and/or the impacts of response measures on Parties referred to in those paragraphs. Among the issues to be considered shall be the establishment of funding, insurance and transfer of technology.<sup>48</sup>

While Article 2.3 specifically refers to trade, Article 3.14 refers merely to “impacts of response measures”, which could include a number of things. As we shall see later in this chapter, developing countries in particular argue that trade is one of the more important elements to address while considering the impact of response measures.

In addition to the acknowledgement of the risks related to response measures, subsequent decisions under the Kyoto Protocol, in particular Article 16 under 1.CP.10, adopted in Buenos Aires in 2005, provide for measures to address building resilience to possible impacts of response measures, in particular through economic diversification. Similarly to Article 3.14 of the Kyoto Protocol, there is no explicit mention of trade in Article 16 under 1.CP.10. Trade is however a crucial component in any strategy towards diversification, particularly in relation to economic diversification.

Decision 31/CMP.1,<sup>49</sup> taken by Parties to the Kyoto Protocol in Montreal in 2005 was a ground breaking agreement between developed country Parties to the Protocol and developing countries. The Montreal decision recognizes that minimizing the impacts arising from the implementation of Article 3, paragraph 1 of the Kyoto Protocol is

a development concern affecting both industrialized and developing countries.<sup>50</sup> The decision therefore commits each Party included in Annex I to take fully into account the consequences of its climate change mitigation actions on developing countries, and to prevent or minimize their adverse effects. It further requests that Annex I Parties provide information regarding their efforts to implement their commitments under Article 3, paragraph 1 of the Kyoto Protocol in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties. The decision also invites non-Annex I Parties to provide information on their specific needs and concerns relating to the adverse social, environmental and economic impacts arising from the implementation, by Annex I Parties, of commitments under Article 3, paragraph 1 of the Kyoto Protocol. It further requests Parties included in Annex II to the Convention to provide support for that purpose. As a concrete measure, the Montreal decision calls for the development of guidelines to help determine if Annex I Parties are striving to minimize adverse effects - including the adverse effects of climate change - on international trade, as well as the social, environmental and economic impacts on other Parties, particularly developing country Parties. Developing countries, especially those in the G77 and China, have however widely stressed that several of these actions have not been properly implemented.

#### **4.3 From Bali to Durban: Trade High on the Agenda but Discussions Remain Superficial**

As COP 13 took place in Bali in 2007, there was a major momentum to address climate change. This was due to several reasons, such as the discussions triggered by Al Gore’s film “An Inconvenient Truth” - an eye-opener to many -, economic analysis in the Stern-report<sup>51</sup> and convincing scientific arguments in the Fourth Assessment Report (AR4) of the IPCC. Against this backdrop, Parties to the Convention succeeded in launching a new process to “enable the full, effective and sustained implementation of the Convention through long-term cooperative action”,<sup>52</sup> the so-called LCA-track. The process

was set to address a shared vision for long-term cooperative action, enhanced action on mitigation, adaptation, technology development and transfer, and provision of financial resources and investment.

COP 13 marked the beginning of an era for the trade and climate change interface. Indeed, for the first time, trade ministers were convened by the presidency of the COP, Indonesia, parallel to the climate negotiations, to specifically discuss trade and climate linkages.

After Bali, the notion that climate change action could involve trade distortions and consequently menace economic development was well established. Until COP 17, trade issues therefore appeared in practically all bodies and groups under the Convention and percolated even to the “shared vision”. Planned policy measures at the national level, such as the US attempts to adopt a domestic climate change mitigation policy, showed proof of the use of trade tools as they included draft border carbon measures. In spite of this development, delegates have witnessed that any discussion on trade remains superficial without ever developing in depth into a more conceptual discussion.<sup>53</sup>

Over the following years, Parties have been negotiating language on trade. In particular, there have been several suggestions to include language on unilateral trade measures. Positions have however been so far apart that no agreement has been reached. The only feasible solution has therefore been to drop all reference to trade, other than to merely reiterate the language of the Convention, such as in the Cancun Accords, Article 90.

At COP 17 in Durban in 2011, Parties agreed to launch a new process through the Durban Platform for Enhanced Action.<sup>54</sup> The process aims at developing a protocol, another legal instrument or a legal outcome under the Convention, applicable to all Parties. This process is intended to raise the level of ambition, with specific mention of mitigation, so as to close the gap between the aggregate effect of Parties’ mitigation pledges in terms of GHG emissions and the aggregate

emissions pathways consistent with having a likely chance of holding the increase of global average temperature below 2 or 1.5 degrees Celsius compared to pre-industrial levels.

This decision may very well represent a paradigm shift with respect to mitigation and to the CBDR. Indeed, all Parties will be bound by the outcome of the process, whereas there is no explicit mention of the different responsibilities and capabilities of countries. What this will mean will have to be defined over the coming years. Whereas it is not to be expected that all countries will have to contribute equally, the decision most certainly paves the way for expectations of increased mitigation action by major emitting countries - developed as well as emerging economies.

Regarding trade, this is a significant development. Indeed, the concerns for carbon leakage and distortions to competitiveness through trade stem from expectations of asymmetrical climate change action. An increased level of mitigation action by major economies such as China and India may contribute to a more level playing field between these countries and Annex I-countries, thereby reducing, while not eliminating, the competitiveness concerns. At the same time, it may also result in a pushing of the concerns further, so that the same concerns appear with respect to less developed countries with lower or no mitigation commitments.

#### 4.4 A Forum on Response Measures

Response measures are measures put into place to address climate change that can have an impact on the social and economic development of other countries. Trade is one of the particular concerns shared by developing countries in this context. There are two elements to the trade dimension of response measures. First, response measures can have an impact on the trade of other countries. One such example are carbon standards or labels which can be a purely climate-related measure that may distort trade. Second, climate action can take the actual form of trade measures, of which border carbon measures are the most notorious example.<sup>55</sup>

In the Cancun Agreement of 2010, a process was launched to set up a work programme and eventually establish a forum to address the impacts resulting from the implementation of response measures. During 2011, the subsidiary bodies convened special events to this end. In addition, the secretariat organized workshops to analyze the issues of response measures and risk management with regard to response measures. These were relevant opportunities to engage in trade discussions through presentations and submissions made by Parties.

Although the notion of a permanent forum on response measures was divisive, with developing countries generally in favour and developed countries reluctant, the COP 17 in Durban reached a decision to create a response measures forum. The forum intends to improve the understanding of the impact of the implementation of response measures. Over the years, discussions of response measures have appeared in as many as six different negotiations under the UNFCCC. The creation of the forum, which will be the designated venue for all discussions on response measures, will thus simplify and channel the work previously undertaken in different spaces.

#### **4.5 Related Issues – Agriculture, Bunker Fuels and Technology Transfer**

In addition to the general references to trade described above, there are also more specific trade concerns, in particular related to certain sectors. In this regard, three sectors - agriculture, bunker fuels and technology transfer - will be addressed in this chapter. These sectors were selected because of their common presence in documents, their unresolved character on the trade agenda and their quantitative importance related to GHG emissions. For some Parties, these issues are the most relevant and, for the community as a whole, they are complex and even controversial.

##### **4.5.1 Agriculture**

The agriculture sector will be significantly affected by climate change, and trade in agricultural products will therefore need to adjust so as to sustain food security primarily, but also livelihoods, employment, income levels and economic development more broadly. At the same time, agriculture is a key sector when it comes to mitigation, as the sector contributes by 10-12 percent to global emissions, or as much as 30 percent when considering land-use change.<sup>56</sup> The sector is therefore likely to be affected by the competitiveness concerns discussed above. This is particularly true for a number of countries. Indeed, the 25 top food-exporting countries currently produce 82 percent of all the food traded globally, while accounting for more than 70 percent of global agricultural GHG emissions.<sup>57</sup> Unless these countries manage to curb their emissions without reducing production, they will face difficult trade-offs between mitigation and export revenues.

Similarly, countries on the “receiving end” are concerned about the impact on their economies of response measures undertaken by their trading partners. Examples of such measures include carbon standards and labeling, subsidies for reducing emissions, border tax adjustments and free emission allowances under cap and trade schemes.

Yet, climate change adaptation and mitigation policies, and measures related to agricultural trade remain ungoverned by the Convention.<sup>58</sup> In Bali, the decision to launch the new process on long-term collaborative action included a commitment to take on a sectoral approach, which has led to agriculture being dealt with under the LCA-track. Against the backdrop of difficult discussions relating to trade and the fact that agriculture discussions have been linked to another sector - international transport - agriculture was completely left



out of the Cancun Agreements. In the Durban outcome, agriculture has returned, as the LCA text in Article 75 requests the subsidiary body for scientific and technological advice (SBSTA) to consider “issues related to agriculture” at its next session, with the aim of a decision during COP 18.<sup>59</sup>

#### 4.5.2 Bunker fuels

Bunker fuels, or international transport - in particular aviation and maritime shipping -, is an important driver of both trade and human-induced climate change. In fact, transport is the fastest growing source of CO<sub>2</sub> emissions.<sup>60</sup> The regulation of GHG emissions from international transport potentially means raised costs for moving goods and people around the globe, which has implications for trade. Developing countries situated in remote locations and with a large trade exposure, such as some Small Island Developing States (SIDS),<sup>61</sup> would be particularly affected by higher transport costs.

In terms of governance, the Kyoto Protocol calls on Annex I Parties to work on international transport through the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO).<sup>62</sup> A key challenge is reconciling the IMO’s specific principle of “no favourable treatment”<sup>63</sup> and the fundamental ICAO principle of non-discrimination with the UNFCCC’s principle of “common but differentiated responsibilities”.

“Bunker fuels” or “bunkers”- as the issue of international transport is referred to in the climate negotiations - also remains in the negotiations under the UNFCCC. However, the topic was left out again of the most recent negotiating texts that came out from Durban, much resulting from the contentious divide between Annex I and non-Annex I countries is in this regard.

Developed countries argue that any of their actions against climate change will remain futile if the major emerging economies do not do enough to mitigate their emissions. Indeed, developing countries account for more than

70 percent of current maritime emissions and more than 80 percent of shipping capacity is registered in non-Annex I countries.<sup>64</sup> Given this situation, many developed countries underline the importance of the IMO and ICAO principles for regulating international transport.

Developing country Parties - particularly the biggest developing countries and oil producing countries - meanwhile have resisted the notion of a global approach in which they have to take on emissions reduction obligations. They point to historical emissions of developed countries, stressing the principle of common but differentiated responsibilities. Developing countries are also reluctant to open a precedent, such as a sectoral approach, that requires them to reduce CO<sub>2</sub> emissions at the same levels and costs as developed countries.

There are now two main policy tools for reducing GHGs in aviation and shipping sectors: market-based instruments (MBIs) and efficiency requirements. MBIs would place a price on GHG emissions, serving two main purposes: (i) being an incentive to invest in more fuel efficient ships and airplanes, and to operate them in a more efficient way; and (ii) offsetting - in other sectors - transport emissions. Moreover, MBIs could generate considerable funds that could be used for mitigation and adaptation actions in developing countries.<sup>65</sup> The most recent concern with regard to MBIs is related to the decision by the EU to include aviation in its Emission Trading Scheme (ETS) from 1 January 2012.

Important developments with regard to both MBIs and efficiency standards have also recently taken place in the maritime shipping sector. In July 2011, the first global mandatory GHG reduction regime for an international industrial sector was adopted. This will lead to mandatory reduction measures for all ships from 2013 coming from the implementation of the Energy Efficiency Design Index (EEDI) for new ships and the Ship Energy Efficiency Management Plan (SEEMP) for all ships in operation.<sup>66</sup>

#### 4.5.3 Technology development, transfer and diffusion

A crucial intersection between trade and climate change concerns technology development, transfer and diffusion. In the context of the UNFCCC, developed countries are committed to take all practical steps to promote, facilitate and finance the transfer of environmentally sound technologies and know-how to other Parties, particularly developing country Parties.<sup>66</sup> Furthermore, the UNFCCC establishes a clear link between the extent to which developing countries will implement their commitments under the Convention and the effective implementation by developed countries of their commitments relating to financial resources and the transfer of technology.<sup>68</sup>

For many years, developing countries argued for the need to take concrete steps and measures to operationalize these provisions in a meaningful way. Developed countries, for their part, have pointed to the absence of enabling environments and limited absorptive capacities in recipient countries as the main barriers to technology transfer.

In 2009, the Copenhagen Accord agreed on the principle of a Technology Mechanism<sup>69</sup> intended to “accelerate technology development and transfer in support of action on adaptation and mitigation”.<sup>70</sup> Subsequent deliberations under the AWG-LCA ultimately resulted in an agreement at the Cancun Conference (2010), with further negotiations at COP 17 in Durban (2011)<sup>71</sup> to define the scope, functions and governance of the components of the Technology Mechanism.<sup>72</sup> The decision to create the Technology Mechanism represents a positive development, particularly in view of the long-standing demands by developing countries for the institutional strengthening of the transfer “pillar” under the UNFCCC. The Technology Mechanism has the potential to move the work on technology transfer under the Convention from a “static” approach - based essentially on capacity building and technology needs assessments - to a more

“dynamic” approach geared towards fostering public-private partnerships, promoting innovation, catalyzing the use of technology road maps or action plans, mobilizing national, regional and international technology centres, and facilitating joint research and development activities.

In the UNFCCC, discussions on technology transfer and IPRs have been one of the most divisive issues. On the one hand, industrialized countries and the private sector tend to consider IPRs as essential to promote and foster innovation in the clean energy sector. On the other hand, many developing countries tend to view them as a possible barrier to access existing environmentally sound technologies. During the course of the discussions since the Bali Action Plan, developing countries have made a wide range of proposals aiming to address the role of IPRs. Proposals include the exclusion of climate change technologies from patentability in developing and least developed countries, the expanded use of the flexibilities of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) under the WTO - such as compulsory licensing to access climate change technologies -, the sharing of publicly funded technologies, and the creation of a Global Technology Pool for climate change that ensures access to IPRs protected technologies on royalty free terms for developing and least developed countries. However, until now there has been no agreement on the mention of IPRs in the UNFCCC outcomes.

#### 4.6 Developing Countries’ Perspectives

In addition to the G77 and China, other groupings of developing countries have been formed who act together when they have common interests. This section looks into a few of these groupings that have joint interests and that have been active in the field of trade. It will also provide some more detail on countries within these groups that have been particularly active in the trade-related discussions.

### The G77 and China

An issue often raised in the UNFCCC by the G77 and China with respect to trade regards the question of venue: where should the nexus of trade and climate change be discussed? The group generally claims that trade discussions should take place in the UNFCCC, so that the climate community can send a signal to the WTO. Specifically, the group is in favour of the now adopted response measures forum. Such a forum could, according to the group, serve for

- “Identifying, quantifying and considering means to address the adverse impacts of measures taken to mitigate climate change on developing country Parties.
- Providing support for the integration of economic diversification into sustainable development strategies and for facilitating efforts to achieve economic diversification in developing countries.
- Encouraging direct investment, in particular through technology transfer from developed countries to assist and promote the economic diversification of developing countries.
- Addressing the extent to which measures taken to mitigate climate change that constitute restrictions to trade raise concerns for developing country Parties with respect to their impact on social and economic development in developing countries.
- Removing the barriers to effective technology transfer and of financial resources necessary to respond to mitigation measures”.<sup>73</sup>

One issue that has catalyzed this union is the opposition to the use of unilateral trade measures. The group argues that through such measures, developed countries would be passing

on their mitigation burden onto developing countries, thereby contravening the principles of the Convention.<sup>74</sup> Measures that the group has mentioned explicitly in this context are border carbon adjustment measures, carbon taxes and carbon footprint labels.

The G77 and China, in 2008, proposed the institution of the Technology Mechanism, together with the establishment of a strong Executive Body and regional technology excellence centers.<sup>75</sup> In the same proposal, the group called for the establishment a Multilateral Clean Technology Fund (MCTF). The idea was that the Fund would provide financial resources linked to technology transfer, inspired by the Multilateral Fund for the Implementation of the Montreal Protocol on Substances That Deplete the Ozone Layer (1990).<sup>76</sup> The recent establishment of the Technology Mechanism partially satisfies the G77 and China proposal, although financing issues remain undecided. In 2011, the groups’ inputs were mainly focused on governance issues, concerning the mission, functions and funding of the Climate Technology Executive Committee.<sup>77</sup> In the group’s view, the CTCN should, for example, report to the Technology Executive Committee.

Within the G77 and China, a few members have been particularly active with regard to trade. One country to highlight in this context is **Argentina**, who frequently coordinates the G77 on matters related to trade. Argentina advocates the notion that trade should be discussed in the UNFCCC, and more particularly in the forum on response measures, so that the UNFCCC can send a signal to the WTO that will help the trade body interpret trade rules while taking climate change concerns into account.<sup>78</sup> The country is fiercely opposed to unilateral measures and, more broadly, to market-based measures in climate change mitigation. Argentina has made a number of submissions outlining these arguments together with a number of other developing countries.<sup>79</sup>

One submission, for example, states the following:

Decides that the developed country Parties shall not resort to any form of unilateral measures, including tariff, non-tariff, and other fiscal and non-fiscal border trade measures, against goods and services from developing country Parties on any grounds related to climate change, including protection and stabilization of climate, emissions leakage and/or cost of environment compliance; recalling the principles and provisions of the Convention, in particular Article 3, paragraphs 1, 4 and 5, Article 4, paragraphs 3, 5 and 7, and taking into account the principles of equity, common but differentiated responsibilities and respective capabilities and the obligations of the developed country Parties to provide financial resource, transfer technology and provide capacity building support to the developing country Parties.<sup>80</sup>

### The African Group

The African region suffers greatly from climate change but lacks capacity to respond to the crisis. At the same time it is, with a few exceptions, only a minor contributor to climate change. Against this background, the region is striving for a common position on climate change. This is however being challenged by important differences between the 54 countries in the African group, both in terms of economic development and carbon emissions, and by political tensions between countries. Close economic ties to China, as well as oil-exporting of some African countries are also likely to make it more difficult to come to a common position.<sup>81</sup> Nevertheless, the region is emerging as a group with an increasing weight, and when acting as such can have a significant impact in multilateral processes. African countries are no longer afraid to say no in global negotiations, such as on trade and climate change.<sup>82</sup> The new Africa that has emerged since the 1990's has developed an agenda for the region which is marked by pragmatism.

On the issue of trade, there are a few common positions. In particular, the African Group, together with other developing countries, has contributed to a few submissions where strong language is put forward, prohibiting the use of trade measures for any reason.<sup>83</sup>

The African Group has also underlined the need to further engage in, and understand the impact of response measures, particularly trade and climate change, within the context of a forum on response measures.<sup>84</sup> The group has expressed a concern that measures to address climate change that will impact on trade are likely to proliferate, and that such measures could be referred to the WTO dispute settlement mechanism, "where panels and arbitrators will make judgments based on unclear rules and disciplines". At the same time, the group argues that the WTO will not be able to address these issues given the current stalemate of the Doha negotiations. Therefore, the Africa Group argues that

Parties and Member States should begin to think about these risks in a more systematic and coherent manner to avoid a situation where UNFCCC outcomes increasingly clash with trade rules. Through a dedicated forum to discuss these issues, we could begin to identify the range of measures that are relevant in this regard and to think about how they should be designed to minimize risks to trade, while addressing our objectives under the Convention.

In 2011, the African Group took part in a joint submission with Argentina, Brazil, China, India and six other developing countries to stress the importance of using existing flexibilities in the international IPR regime to access climate-friendly technologies. In particular, the group referred to the TRIPs Agreement to reaffirm that "each Party retains its right to grant compulsory licenses and the freedom to determine the grounds upon which such licenses are granted". The flexibilities provided by the TRIPs Agreement "may be used to the fullest by the developing countries to address adaptation or mitigation of climate change, in

order to enable them to create a sound and viable technological base”.<sup>85</sup>

The African Group also stresses the urgent need to address the issue of technology transfer, including the identification and removal of barriers preventing access to climate-related technologies and the appropriate treatment of IPRs, as well as the removal of patents on climate-related technologies for non-Annex I Parties.<sup>86</sup>

### The ALBA Group

The Bolivarian Alliance for the Peoples of Our America (ALBA) is a group of nine Latin American countries<sup>87</sup> that coordinate their climate change positions. The group’s climate radicalism and its north-south divide rhetoric make the alliance a discernible player in international climate change negotiations.<sup>88</sup> In addition to supporting an ambitious limit to temperature rise of one degree Celsius compared to pre-industrial levels, the ALBA Group wants industrialized countries to contribute six percent of their Gross Domestic Product (GDP) for climate financing in developing countries.<sup>89</sup> The ALBA Group has established an image of itself as a divisive force in climate change negotiations, particularly through its behaviour at COP 15 in Copenhagen, where some of its members, including Bolivia, Cuba, Nicaragua and Venezuela, were being held responsible for the not legally binding character of the Accord.<sup>90</sup>

The ALBA Group has not articulated much of a common position with regard to trade and climate change. The group has however made clear that it rejects the use of market-based mechanisms for climate change mitigation, although Ecuador holds a less radical view on this issue.<sup>91</sup>

The countries mainly responsible for the groups’ coordination of positions - Venezuela, Bolivia, Ecuador, Cuba and Nicaragua - have further stressed the importance of access to technologies by developing countries for climate change mitigation. These countries have expressed

the need for the “funding and inventory of appropriate technologies, free from intellectual property rights, particularly patents”.<sup>92</sup>

Venezuela and Bolivia are among the most active Parties in the matter of IPRs. These countries stress that “the Parties shall ensure that intellectual property rights and agreements shall not be interpreted or implemented in a manner that limits or prevents any Party from taking any measures to promote mitigation of climate change”. To promote technology transfer and diffusion, Venezuela and Bolivia propose, *inter alia*, the creation of global pools for environmentally-friendly goods and technologies, differentiated prices between developed and developing countries and time limitation for patents on climate-friendly technologies.<sup>93</sup>

Bolivia appears to be particularly firm in its view on unilateral measures and market-based mechanisms for climate change mitigation. In its draft decision for COP 17, submitted to the UNFCCC secretariat, Bolivia clearly expressed its opposition to unilateral measures against goods and services from developing country Parties on any grounds related to climate change.<sup>94</sup>

In line with the common ALBA position, Bolivia strictly opposes the use of market-based mechanisms to curb GHG emissions - a view which, according to Bolivia, is supported by “recent obvious and massive market failures”.<sup>95</sup> An international carbon market to help Annex I Parties meet their commitments or to finance climate actions in developing countries is therefore not acceptable for Bolivia.<sup>96</sup> This strong opposition to market mechanisms under the Convention was a critical reason for the country’s rejection of the Cancun Agreements at the COP 16 in 2010, where it was the only Party to object the outcome.

**Bolivia** has further clear views with regard to technology transfer and intellectual property, claiming that climate change related technologies must fully rest within the public domain. Bolivia argues for the free transfer of

technologies to developing countries to help them curb emissions, stressing that IPRs should not constitute barriers to such transfers.<sup>97</sup>

Similarly, **Venezuela** has a strong opinion about the effectiveness of market-based mechanisms, claiming that these do not promote climate change mitigation, but instead shift the mitigation burden from developed to developing countries.<sup>98</sup>

Regarding technology transfer and intellectual property, Venezuela has stressed the importance of removing barriers and other constraints on environmentally sound technologies and to limit and reduce time patents on such technologies. This, Venezuela argues, is crucial to ensure that no Party is prevented from implementing climate change mitigation measures.<sup>99</sup>

On response measures, Venezuela has stressed that climate change measures adopted by developed country Parties have impacts on developing countries. The country therefore calls upon developed countries to minimize the impacts of such measures on developing country Parties so that their development potentials and poverty eradication are not undermined.<sup>100</sup> Given its view on response measures, Venezuela has been a clear proponent of the establishment of a permanent forum on response measures, arguing that “most developing countries lack the capacity to assess the scope and magnitude of the negative consequences of the implementation of response measures on their own”.<sup>101</sup>

In the context of response measures, Venezuela has clearly stated that unilateral trade measures like border carbon adjustment tools, labeling schemes, subsidies or free allowances of emission permits in emissions trading systems must be avoided due to their potential to create distortions in international trade.<sup>102</sup> Like other developing countries, Venezuela considers unilateral measures as threats for developing countries.

### The Alliance of Small Island States (AOSIS)

The Alliance of Small Island States (AOSIS) is a coalition of 43 small island and low-lying coastal countries that share similar development challenges and concerns about the environment, especially their vulnerability to the adverse effects of global climate change. Members and observers are drawn from all oceans and regions of the world: Africa, the Caribbean, the Indian Ocean, the Mediterranean, the Pacific and the South China Sea.

As the mere existence of many AOSIS members is threatened by climate change, notably through rising sea levels, a primary objective of the group in the climate change negotiations is to ramp up mitigation efforts.<sup>103</sup> Other common characteristics are that the members’ economies often rely to a high degree on natural resources such as agriculture and fisheries, as well as on tourism. As these sectors are likely to be affected both by climate change itself and by mitigation policies, AOSIS members have similar interests when it comes to needs for adaptation and, in particular, for building resilience and striving for economic diversification.<sup>104</sup> In addition, the physical remoteness of many members makes them vulnerable to possible regulations of emissions from international transport.

Reflecting these common concerns, the alliance made two submissions on the forum on the impact of response measures in 2011.<sup>105</sup> In the first one, AOSIS specifically mentions potential impacts of possible mechanisms and measures to regulate emissions from international transport (air and maritime) as elements that could be encompassed by the work programme. Interestingly, in contrast to most developing countries, the alliance also highlights the need to better understand both the positive and negative impacts of response measures.

The group considers the development, transfer, diffusion and deployment of technology

of crucial importance in the global effort to mitigate climate change. Members also underline the importance of finding adequate financial resources to promote technology transfer. In particular, “[s]uch financing should be made available to defray and/or pay for the cost of Intellectual Property Rights or pay for alternative access regimes”.<sup>106</sup> AOSIS is further in favour of flexible measures on IPRs for climate-friendly technologies.

**Singapore**, a member of AOSIS, expressed its view that trade, *per se*, is not a mandated negotiating item in the Bali Action Plan and that the WTO is the only competent body for multilateral rule-making in the domain of international trade. Nonetheless noting the textual proposals on the use of unilateral trade measures, Singapore has proposed that discussions on trade in the UNFCCC should be guided by a number of elements.<sup>107</sup> In particular, the country emphasizes the importance of free and open trade.<sup>108</sup> In addition, Singapore provides arguments for a positive trade agenda, stressing that “Trade openness and markets, including climate friendly goods and services, is the appropriate response to complement UNFCCC efforts to combat climate change”. Singapore further argues that “Parties should consider the removal of market distortions as this can facilitate a more rational and efficient use of natural resources. The removal of market distorting measures can also have a positive impact on global efforts to address the adverse impacts of climate change”.<sup>109</sup>

Like the majority of developing countries, Singapore rejects the use of trade restrictions to achieve the objectives of the UNFCCC. However, a major difference is that it uses language faithful to the spirit of the Convention compared to the considerably stronger language used by a number of developing countries quoted above<sup>110</sup>, which does not include the disclaimer of “arbitrary or unjustifiable”. The position is further articulated in the following submission:

[...] No Party should seek recourse to trade restrictions. Trade restrictions are not, and will never be, the answer to the

climate problem. First, trade restrictions create market distortions; Second, they have adverse effects on trade; Third, they will be inconsistent with UNFCCC Article 3.5 and the WTO Agreements; Fourth, they will be adversarial. They will invite retaliatory actions and distract and create an unfavourable climate for international cooperation at the UNFCCC. In sum, trade restriction is a *lose-lose* proposition. It will neither assist economic development nor the attainment of climate change-related objectives. [...]<sup>111</sup>

### The BASIC Group

The BASIC countries are a group of four key emerging economies - Brazil, South Africa, India and China - formed as a result of fragmentation within the G77 group and increased pressure from developed countries who demanded that large developing countries take on reduction commitments.<sup>112</sup> Indeed, in 2008, the BASIC countries jointly accounted for over 31% of global GHG emissions.<sup>113</sup> The group has also come together as a result of broader geopolitical developments, as their “weight” has lately increased in international affairs and in the global economy.<sup>114</sup>

The group shares a climate coordination platform aimed at advancing a common position in climate change negotiations and to encourage collaboration on mitigation and adaptation. As part of their common position, the BASIC countries demand GHG emission reduction commitments from developed countries as well as funding for developing country climate change mitigation and adaptation actions.<sup>115</sup>

The group’s common position on trade and climate change rests particularly on its opposition to unilateral trade measures on any grounds related to climate change, such as the protection and stabilization of climate, carbon leakage or the costs of environmental compliance.<sup>116</sup> During the seventh BASIC Ministerial meeting in May 2009, the countries reaffirmed that unilateral approaches are incompatible with the provisions and principles of the Convention.

They demanded that “issues with regard to maritime and aviation emissions, agriculture and HFC’s [hydrofluorocarbons] should also be addressed in accordance with the provisions and principles of the Convention”.<sup>117</sup>

At a following Ministerial meeting in August 2011, the BASIC Group made clear that they are concerned about unilateral climate change measures due to their negative effects on third countries. They specifically expressed their concern over the use of unilateral measures in the transport sector, referring to the decision of the EU to include aviation in its ETS.<sup>118</sup>

The BASIC countries share the concern that cooperative sectoral approaches and sector-specific actions undertaken in the name of climate change may effectively constitute a form of “arbitrary or unjustifiable discrimination or a disguised restriction on international trade”, particularly on exports from developing countries. The group therefore stresses that such approaches and actions shall not form barriers or lead to distortions in international trade, but must respect an open international economic system, so that development and poverty eradication in developing countries are not undermined.<sup>119</sup>

Intellectual property is of particular importance to the BASIC countries. The group has stressed on several occasions the urgent need to promote and enhance cooperative action with regard to the development and transfer of environmentally sound technologies covered by IPRs to developing country Parties.<sup>120</sup> In a submission to the UNFCCC secretariat in June 2011, the BASIC countries, amongst other Parties, argued that “the flexibilities of the international regime of intellectual property as articulated by the TRIPS Agreement may be used to the fullest by the developing countries to address adaptation or mitigation of climate change, in order to enable them to create a sound and viable technological base”.<sup>121</sup> Moreover, in November 2011 the BASIC countries issued a joint statement to back up the Indian proposal to include IPRs in the agenda of the COP 17.<sup>122</sup> Finally, the BASIC group asked the Conference to clarify the link

between the Technology Mechanism and the future Green Climate Fund.

Agriculture is another issue area that has received attention from the BASIC Group in the context of trade and climate change. In line with their general opposition to unilateral climate change measures, the countries stress that cooperative sectoral approaches and sector-specific actions shall not compromise food security.<sup>123</sup>

Within the BASIC Group, **India** is particularly vocal on trade issues. In a presentation given at the UNFCCC on unilateral trade measures,<sup>124</sup> India stressed that it “firmly believes that trade measures are not the appropriate means to address climate change”. In this context, the country reiterated its view on the need to transfer environmentally sound technologies and to enable access to technologies protected by IPRs.

In a submission to the UNFCCC in September 2011, India further made a proposal for the inclusion of additional agenda items in the provisional agenda for COP 17.<sup>125</sup> One of the items concerned unilateral trade measures, while another demanded the inclusion of access to mitigation and adaptation technologies and related IPRs.<sup>126</sup> The Indian proposal for the inclusion of these two additional items for discussions at COP 17 underlines the importance the country attaches to these issues.

### **The League of Arab States**

The Arab League - officially League of Arab States, with twenty-two members located in Northern Africa and the Middle East - was established in 1945 to promote, encourage and coordinate relations and common measures between Arab states. Among the members of the Arab League are some of the world’s major oil producing and exporting countries. Consequently, their economies will require considerable restructuring over the coming decades to address the decreased demand of their primary export good. Response measures and economic diversification are therefore of great priority to them. In particular, the group



has signaled areas that need to be addressed in future work:

- “Assessing further modeling work to determine, with less uncertainty, the magnitude of the impact of response measures and to assess the impacts of response measures on individual Arab countries.
- Modeling and assessing the effects of policies, such as market approaches (taxes, subsidies, cap-and-trade) on the economies of Arab countries, especially those of the oil exporting countries.
- Addressing the inability to fully disaggregate the impacts of a suite of climate change measures and mechanisms given the intricate linkages between national and international economies, and the complexities among different sectors”.<sup>127</sup>

On trade, the Arab League adheres to the broad segment of developing countries that are strongly opposed to unilateral measures. In 2011, the group supported the two submissions rejecting the use of unilateral trade measures for climate change purposes quoted above,<sup>128</sup> and reiterated its position in a joint statement in Durban together with India, China, Venezuela and Argentina under the LCA.<sup>129</sup>

### **The Organization of the Petroleum Exporting Countries (OPEC)**

The Organization of the Petroleum Exporting Countries (OPEC) is a developing-country inter-governmental organization with an agenda and a membership partly overlapping with the Arab League.<sup>130</sup> The organization’s members share as common characteristics rapidly growing and very young populations, and economies highly dependent on oil export revenues.

Consequently, OPEC trade concerns in the context of climate change are mainly related to loss in export revenues and loss from shifting OPEC’s economies toward industries where they have less of a comparative

advantage. Members are further concerned about reduced domestic demand for goods and services, higher costs of imports, trade barriers, higher financing costs and social spillover effects as a result of climate change mitigation measures.<sup>131</sup>

Saudi Arabia, a member of both OPEC and the Arab League, has been one of the most active Parties with regard to issues related to the impact of response measures during the last decade. The country’s concerns are mainly related to the theoretical reduction of oil consumption and arise from the heavy dependence of Saudi Arabia on oil. Due to possible future implications on oil trade, Saudi Arabia has proposed the development of a detailed work programme based on the examination of policies and impacts, leading to the development of both impact reduction and resilience building measures. In a number of submissions, Saudi Arabia articulates its concerns with respect to trade in greater detail. One concern relates to the adverse effects of unilateral measures like subsidies, free allowances and border tariff adjustments against developing countries’ goods and services. Saudi Arabia has also expressed its concerns with regard to adverse spillover effects of trade and market barriers on the social, environmental, and economic opportunities in developing countries, as well as on the investment opportunities. The country has further shown a preoccupation with the effects of policy measures like border carbon adjustment schemes on the social and economic growth of exporting developing countries, with the effects and costs resulting from shifting production and export patterns and with the impacts of eco-trade barriers on the supply chain of production, export, and procurement patterns of developing countries.<sup>132</sup>

**Saudi Arabia** has also outlined a number of priorities for reducing the impact of response measures, which includes the promotion of a supportive economic system and the progressive reform of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all GHG-emitting sectors, as

well as the removal of subsidies associated with environmentally unsound and unsafe technologies. Saudi Arabia further calls for measures to make sure that IPRs do not become a barrier to the transfer of climate-friendly technologies.<sup>133</sup>

#### 4.7 Analysis and Recommendations

Although trade is closely linked to climate change mitigation and adaptation, and constitutes a main concern for Parties to the UNFCCC, negotiations so far lack depth in this area. This is linked to the fact that there is no consensus on where and whether to address trade at all in the UNFCCC. The assessment above shows that as a general rule, developing countries are however concerned about how trade will be affected by climate change and the related policies, and are favourable to having such a discussion in the UNFCCC. More specifically, the now adopted forum on response measures is a space that many deem appropriate for at least parts of these discussions.

The mainstream view of developing countries on trade and climate change is to be strongly opposed to unilateral trade measures. This refers back to trade discussions that have taken place to a great extent outside of the UNFCCC negotiations since COP 13 in Bali, which involve threats of imposing border measures and to include international transport in domestic carbon schemes. Yet, the articulation of the concerns remains very basic. The language is often very far-reaching in that it is prohibitive of “any form of unilateral measures”. This fails, however, to recognize that at this point of climate change governance, where there is no multilateral agreement for mitigation such as a global carbon price or global sectoral solutions, there is not much but unilateral measures. At the same time, such sweeping language also misses to single out climate measures that are potentially harmful to trade, while being primarily climate policies, such as

carbon standards or emissions trading schemes. In order for countries to be able to articulate their positions, they would need first and foremost a forum for having a discussion about trade and climate change, and second a better understanding of the actual links between trade and climate change, and the potential relevance for their respective economies.

Concerns for carbon leakage and distortions to competitiveness through trade are of crucial importance in relation to climate change mitigation. Indeed, they are often being stated as a key reason why countries face difficulties in putting in place effective domestic climate mitigation policies. Although the concerns are generally given more weight than what can currently be explained by any empirical evidence, this does not reduce their impact. Therefore, if countries are to be able to enhance climate change action, it is important that these concerns be addressed, preferably within the context of the UNFCCC and the new Durban Platform. Scrutinizing and analyzing the risks for leakage can both reduce the perception that unilateral measures are futile and damage competitiveness, and allow countries to work together to identify appropriate measures for reducing the risks of leakage. This could contribute to an enhanced mitigation action.

Finally, a priority shared by the majority of developing countries is the need for enhanced transfer of technology. In this context, it is relevant to acknowledge the positive role trade can play in the promotion of technology transfer related to climate change mitigation and adaptation - an issue that has not been explored to its full potential. Indeed, the nexus between technology transfer and trade is not sufficiently taken into consideration in UNFCCC discussions on technology transfer. The extent to which trade can contribute to the diffusion of environment-friendly technologies, for example, certainly merits further examination.

## 5. ISSUES AT THE INTERSECTION OF TRADE AND CLIMATE CHANGE IN THE WTO PROCESS

This section addresses developing country concerns and positions relating to climate change in the context of the work undertaken at the WTO. For this purpose, the chapter is divided into five sections: (i) an introduction to the provisions of the WTO Treaty relevant to climate change and sustainable development and how they have been applied in actual WTO practice and cases; (ii) the relevant work and the evolution of discussions in the Committee on Trade and Environment; (iii) the state of play and potential progress in the relevant negotiations mandated by Article 31 of the Doha Ministerial Declaration; (iv) the developing country perspectives on issues at the intersection of trade and climate change as articulated in the WTO; (v) a section providing analysis and recommendations.

### 5.1 The WTO's Sustainable Development Mandate and Case Law Pertaining to Climate Change

The WTO's sustainable development objective dates back to 1994,<sup>134</sup> when the preamble of the agreement establishing the organization supported "the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so".<sup>135</sup>

Accompanying the preamble and agreements establishing the WTO was a ministerial decision directing the WTO General Council to establish a Committee on Trade and Environment (CTE), a decision referred to in the Rio Declaration and Agenda 21, thereby further grounding sustainable development and environmental preservation objectives into the trading system. The decision affirmed that "there should not be, nor need be, any policy contradiction between upholding and safeguarding an open, non-discriminatory and equitable multilateral trading system on the one hand, and acting for the protection of the environment, and the promotion of sustainable development on the other".<sup>136</sup>

Already back in 1994, the work programme of the CTE foreshadowed the future intersection of work at the WTO and the UNFCCC, particularly relating to carbon taxes and carbon footprint labeling, when it required the CTE to "address [...] the relationship between the provisions of the multilateral trading system and (i) charges and taxes for environmental purposes; and (ii) requirements for environmental purposes relating to products, including standards and technical regulations, packaging, labelling and recycling".<sup>137</sup> These provisions have served as a basis for recent work in the committee dealing directly with the climate change issue of border carbon tax adjustments.

To complete the constitutional aspects of the WTO interface with climate change and environmental concerns, one must look at the Article XX chapeau - which reflects Principle 12 of the Rio Declaration, Chapter 9 of Agenda 21 and Article 3, Paragraph 5 of the UNFCCC Convention - and, in particular, at the provisions contained in Articles XX (b) and XX (g) of GATT 1994. These twin provisions in Article XX are the traditional GATT 1947 exceptions that were intended to give policy makers the necessary leeway to ensure domestic environmental measures could not be negated by liberal trade policy obligations, while also providing trade policy makers the counterpart assurance (embodied in the *chapeau*) that environmental policy measures would not be used as a tool for trade protectionism:

GATT 1994 Article XX:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination [...], or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

(b) necessary to protect human, animal or plant life or health;

(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;

These Article XX provisions, in conjunction with the 1994 preamble and the ministerial decision creating the CTE, paved the way for international trade and environmental commitments to become intertwined within the WTO.

What follows from 1994 is a period, continuing to today, in which the WTO's judicial organ, the Appellate Body, confronts the difficulty of interpreting this WTO law relating to the environment, with its decisions clearly having implications for the interrelation between climate change and trade policy.

#### The WTO case law pertaining to climate change and low-carbon growth

Early on, the Appellate Body pronounced on the importance of Article XX exceptions for preserving domestic policy sovereignty regarding environmental and climate change concerns, and the fact that Article XX (b) and (g) exceptions were to be interpreted in a dynamic and not a static manner.<sup>138</sup> *US Gasoline*, a case brought by Venezuela and later Brazil that challenged the application by the US of stricter rules for imported than for domestically refined gasoline, was in no way a challenge of countries' rights to set environmental standards. Importantly, through the case, the clear guideline of state autonomy was set: "WTO Members have a large measure of autonomy to determine their own policies on the environment (including its relationship with trade), their environmental objectives and the environmental legislation they enact and implement".<sup>139</sup>

However, as well stated in *US Gasoline*, the autonomy to enact environmental measures "is circumscribed only by the need to respect the requirements of the General Agreement", i.e. the need to respect the chapeau of Article XX.<sup>140</sup> This boils down to the requirement that

the environmental measure be made in *good faith* and not be an arbitrary or disguised trade restriction. The good faith test is hard WTO law and international law that can be expected to continue in its stringency.<sup>141</sup>

In *US Gasoline*, for example, the Appellate Body determined that the US law was primarily aimed at the "conservation of natural resources", thus coming within the scope of Article XX (g). This underlined the general recognition by the Appellate Body of a country's autonomy to set environmental standards. However, at the same time the law was seen to constitute an "unjustifiable discrimination".<sup>142</sup> The US hence failed the good faith test and was not granted an exception under the Article XX provisions.

Moreover, it is also important to avoid a loose or superficial use of climate change mitigation or low-carbon growth reasons. In *China Raw Materials*, the WTO Panel found little credibility in the extensive claims of climate change mitigation justifications to support either an Article XX (b) or (g) exception for export restrictions on energy intensive and highly polluting products.<sup>143</sup>

[A] Member must do more than simply produce a list of measures referring, *inter alia*, to environmental protection and polluting products. It must be able to show how these instruments fulfil the objective it claims to address. [...] The documents [...] do not sufficiently indicate that the export restrictions seek to reduce pollution resulting from the production of EPR [Energy-intensive, highly-polluting, resource-based] products.<sup>144</sup>

There must hence be a demonstration - past, present or future - of a material contribution of the measure to the achievement of the climate change objective. This was not the case in *China Raw Materials*. In the recent report on this case, the Appellate Body found that China's export restrictions on EPR products were not justified on resource conservation or environmental protection measures, therefore failing to fulfil the Article XX exceptions.<sup>145</sup>

Two other cases have also been filed which will test the WTO consistency of Canadian subsidies and government procurement programmes that are expressly designed to promote renewable energy and green economic growth. The challenges before the WTO panels are mainly based on the Province of Ontario's imposition of substantial domestic content requirements in its Feed-in Tariff Programme for renewable energy projects.<sup>146</sup> There will certainly be more room for debate on policy coherence and conflict of norms relating to the intersection of trade rules and climate change mitigation measures.

## 5.2 Climate Change Discussions in the Committee on Trade and Environment

The CTE was established with the objective "to coordinate the policies in the field of trade and environment".<sup>147</sup> To achieve this objective of coordination, the committee possesses only two powers in its capacity as a subsidiary body of the WTO General Council: (i) to *identify* the connectivity and interaction of trade and environment measures in order to promote sustainable development, and (ii) to *recommend or propose* the modification of any WTO rules in order to promote the mutual supportiveness of trade and environment measures towards the so-called triple win of trade, the environment and sustainable development goals while balancing the need to avoid protectionist pressures with the need to be responsive to environment objectives.<sup>148</sup>

Given the committee's core objective of coordination and its limited authority, the committee needs to act as a forum for informed debate on how trade and environment measures are interlinked and to be coordinated to avoid or minimize regulatory conflict. Despite its limitations, the CTE provides a powerful tool for governments to achieve a coordinated approach towards trade and environment measures, and more particularly for this paper, an approach towards climate change mitigation related trade issues.

The early history of the committee was characterized by a sharp divide between members wishing to directly discuss climate change mitigation and adaptation issues and those members believing it was not within, or would not be useful to the committee's work.<sup>149</sup> More recently, the committee has shifted towards accepting that climate change issues are an integral part of the committee's work programme.

A time marker - in what is concededly a gradual and still continuing transition - was the committee's 10 July 2009 meeting at which it agreed to commence discussions directly on the topic of the relationship between trade and climate change, and on developments in other fora, as well as to have further informal sessions on the findings of the WTO-UNEP Report on *Trade and Climate Change*.<sup>150</sup> The report is noteworthy for being the first attempt to articulate in simple terms the theoretical and scientific linkage between trade policy, trade measures and actual trade volumes to climate change and levels of carbon emissions.

Section 5.4 provides an overview of developing country positions on specific climate change policies and measures that have actually been brought before the committee as intersecting with specific trade rules. According to the CTE mandate, issues covered therefore include carbon-related charges and taxes; carbon footprint labeling and standard-setting; market access impacts of environmental measures;<sup>151</sup> as well as technical assistance, capacity building and expertise-/experience-sharing.<sup>152</sup>

The issue of border carbon adjustment measures has been a sensitive topic in the committee. It relates directly to the legal question of the WTO consistency of additional costs and taxes being imposed at the border to address climate change mitigation and carbon leakage issues. There is also the related question of arriving at an objective or universal basis for such carbon adjustments. Border measures were discussed as potential subjects of conflict with, or exceptions to, certain WTO rules and it was

this part of the WTO-UNEP report that had attracted some controversy and debate at the 10 July 2009 meeting.<sup>153</sup>

Contrary to border charges and taxes, the work and discussions in the CTE have been rich and more frequent over the past three years in the area of product requirements relating to carbon footprint labeling and standard-setting, with the committee meetings extending, for the first time, beyond the usual one or two meetings in previous years.<sup>154</sup>

### 5.3 Climate Change Linkages in the Special Session of the Committee on Trade and Environment

The launch of the Doha Development Agenda (DDA) in 2001 included a specific trade and environment component calling for agreement on three specific areas:

- Identifying the relationship and enhancing cooperative coordination between trade measures and specific trade obligations in Multilateral Environmental Agreements (MEAs) and WTO rules;
- Establishing cooperative mechanisms between MEA and WTO secretariats including observer arrangements; and
- Improving market access for environmental goods and services.<sup>155</sup>

The last of the mentioned areas allows assessing the goods categories and the positions of developing countries and country groupings with regard to climate change and low-carbon growth as carried out in section 5.4. In providing an overview of the state of play, the next subsection therefore touches upon general issues of cooperation and coordination cutting across all MEAs or environmental categories. Discussions were in many cases aided or informed by parallel negotiations in the UNFCCC.

### MEAs and the WTO and technical assistance for developing countries

There is a bright spot in the negotiations on MEAs and the WTO, as well as on technical assistance for developing countries, as members have converged on embodying the new rules in a draft Decision on Trade and Environment (CTE Decision II) as a follow-up some seventeen years after the first decision of ministers that created the CTE. It is a modest but at the same time significant development, given that the core and single objective of the CTE is to achieve coordination of trade and environment regulations.

In this area of the negotiations, developing countries like India, Argentina and Brazil expressed their view early on that it would be difficult to reach agreement on what exactly is meant by a specific trade obligation (STO) in an MEA. Many of the reports over the years have reflected the state of the debate, and the compromise achieved was founded on members agreeing *not* to attempt a prescriptive or static definition of STOs.<sup>156</sup> There was therefore not a strictly developing country perspective in this regard and in fact Argentina, together with Australia, contributed much through joint submissions.<sup>157</sup> The progress of discussions and the extensive work performed at the committee over the years could, on an illustrative basis, provide examples of what trade-related measures in MEAs might constitute an STO, such as for example the obligation to ban or regulate the import or export of certain products in the context of the Montreal Protocol.<sup>158</sup> Language in the draft CTE Decision II reflects the observation of Members that “an STO set out in an MEA is understood to be one that requires an MEA party to take, or refrain from taking, a particular trade action”.<sup>159</sup>

On the negotiations for facilitating information exchange with MEAs, incorporated in the draft

outcome, members have had a long history of agreeing to the importance of cooperation and collaboration among the WTO and MEA secretariats in order to enhance the mutual supportiveness of trade and the environment.<sup>160</sup> It was also added that coordination at the domestic level among relevant government agencies when negotiating or implementing WTO rules, as well as when negotiating and implementing STOs set out in MEAs, ought to be encouraged.<sup>161</sup> There is likewise a provision for continuing the sharing of domestic experiences by members as part of the agenda of the regular committee on trade and environment. Other aspects of the draft decision relate to the granting of observer status to MEAs.<sup>162</sup> The emerging points of consensus affirm what is already to a great extent current practice in the committee and among the secretariats of the WTO and MEAs.

However, in the area of technical assistance and capacity building highlighted in paragraph 33 of the Doha Ministerial Declaration, there still remains some work for developing countries to obtain full consensus from their developed country partners, an issue further discussed in the next section.

After more than seventeen years, it would be an appropriate step forward if ministers were able to agree to a second decision on trade and environment that enables increased coordination among trade and climate change regulators.

#### **Market access for environmental goods**

Early on, developing and developed countries were fundamentally divided over the market access focus of the mandate of paragraph 31 (iii) of the Doha Ministerial Declaration. The main thrust of the argument of developing countries was that to be faithful to the mandate of sustainable development (paragraph 6 of the Doha Declaration) and the triple win concept enunciated in paragraph 32, the outcome will have to involve more than a reduction of tariffs and non-tariff barriers, and must demonstrate a clear environmental and developmental benefit.<sup>163</sup>

Over the years, the negotiations proved contentious.<sup>164</sup> They would fail, due to the north-south divide in the negotiations, to reach an agreement on a theoretical or foundational methodology (project, list or request and offer approach) on what product or tariff line would qualify as tariff and non-tariff barrier elimination or reduction. In general, developing countries have manifested concerns about the list-based approach, arguing that such lists of environmental goods could end up reflecting an asymmetry between developed and developing countries. The preoccupation is that high-value added manufactured products, generally produced by developed countries and imported by developing countries, would eventually prevail.

However, similar to the compromise approach of avoiding a prescriptive definition for STOs in MEAs, members progressed through an intensification of the negotiations under a two-step process. Under this process, members would instead (i) focus on specific submissions relating to specific tariff lines or products that, on a without prejudice basis, they proposed or considered to be environmentally useful or beneficial,<sup>165</sup> and (ii) move to text-based proposals on modalities and treatment.<sup>166</sup>

In the first part of the process, members' proposals were categorized - without prescriptiveness - according to categories that were by consensus agreed to be environmentally beneficial, namely air pollution control, renewable energy, waste management and water treatment, environmental technologies, carbon capture and storage, and others.<sup>167</sup>

These categories served to anchor what would eventually be dubbed the *reference universe* of 408 tariff lines at the 6 digit level that members had proposed for coverage or inclusion under the 31 (iii) mandate to reduce or eliminate tariffs and non-tariff barriers.<sup>168</sup> By no means can the reference universe be considered an agreed set of goods. However, it provided a frame that allowed discussing and negotiating approaches on modalities for coverage and treatment. Of direct interest to the subject of this study are

the categories with climate change mitigation impact - air pollution, renewable energy, environmental technologies and carbon capture and storage - which represent over 90 percent of the tariff lines identified.<sup>169</sup>

With the reference universe as a frame, the work of the Special Session of the CTE (CTESS) intensified in terms of textual submissions and concrete discussions on coverage and treatment, as well as on the matter of technology sharing and transfer. Delegations were challenged in late 2010 and early 2011 to work on the specific and concrete elements of coverage to which the treatment modalities would apply. On coverage, the intensified work yielded two compromise proposals - a hybrid approach and a combined approach - which were put forward in an effort to bridge the various proposals on the table, and which could provide a compromise starting point for structured discussions on coverage.<sup>170</sup>

On treatment, the options presented are quite limited to the range of tariff-cutting options from zero to less than zero, or from formula cuts to more than formula cuts, as well as to options for greater monitoring and transparency when it relates to non-tariff barriers. Special and differential tariff cut proposals of course related to lesser cuts and to longer time frames.<sup>171</sup>

### Technology sharing and transfer

Parallel to their positions in climate change negotiations in the UNFCCC, developing countries pushed for making technology sharing and transfer priority elements of the market access negotiations. The remaining area of the CTESS negotiations therefore relates to other cross-cutting proposals from developing countries on the propagation and diffusion of environmental technologies, which also bear direct relation to the climate change debate. Argentina, Brazil, China and India have led developing countries in making proposals in this area as discussed below. The area of technology sharing and transfer will probably be key to unlocking the negotiations. Developing countries have long associated it as a factor for delivering lasting climate change mitigation benefits to them.

It is clear from the latest proposals from developing countries that similar to the debate in the regular committee, the Special Session has evolved its discussions towards concrete and clear-cut options. But the challenge remains whether there is now the political will to constructively engage and tackle the demand of developing countries that the market access mandate be complemented by effective technology diffusion mechanisms. Technology sharing and transfer, provided they are fair and mutually beneficial, could then serve as the bridge to generating the triple-win outcome which, in any event, only becomes possible if an agreement on market access improvement for trade in climate change mitigation products is also reached.

### 5.4 Developing Countries' Perspectives

When discussions in the CTE revolved around whether climate change mitigation and adaptation issues should or should not be directly addressed within the committee, there was no clear divide between developed and developing countries on this issue. Nevertheless, it can be said that the EU and its member states were more inclined towards the inclusion of this issue, whereas developing countries, including the main emerging economies and the United States were more inclined towards some caution in discussions about the issue.<sup>172</sup>

On the issue of carbon footprint labeling and market access impacts, developing countries have raised their concerns in the 2009 report of the CTE about "unilateral voluntary carbon footprint labeling schemes, believing that these schemes were not based on life cycle analysis and lacked consistency".<sup>173</sup> Discussions on carbon footprint and labeling as it relates to market access concerns then heated up in 2010 with this topic being discussed in detail during the four meetings of the committee, including an information session devoted to "Product Carbon Footprint and Labeling Schemes".<sup>174</sup>

As summed up succinctly in the 2010 report of the committee, members across the



board expressed clear interest in the topic, particularly as regards:

[...] the competitiveness implications of these schemes for domestic industry; the cost and market access impact of these schemes for developing countries and small and medium-sized enterprises (SMEs), especially in the context of multiple, overlapping schemes and standards; the potential non-neutrality of carbon footprint methodologies; the lack of a uniform methodology for calculating carbon footprints; the risk of discrimination on the basis of non-product related processes and production methods (PPMs); the role of carbon footprint for identifying emissions ‘hotspots’ in the production process; and the relevance of the TBT Agreement to this discussion.<sup>175</sup>

The main concerns of developing countries related to these standards operating as an additional technical barrier to trade on exports from developing countries.

### Singapore

Singapore has been vocal in rejecting the use of protectionist trade measures in the guise of environmental protection. Moreover, the country made clear that it is important to ensure mutual supportiveness and coherence between the WTO and the UNFCCC. In this context, on 30 March 2011, the country formally tabled a paper on “Promoting Mutual Supportiveness between Trade and Climate Change Mitigation Actions: Carbon-Related Border Tax Adjustments [BTAs]”.<sup>176</sup> Singapore clarified that the paper did not have the intention to change WTO or UNFCCC rules. Nor was it aimed to bring UNFCCC negotiations into the WTO. Indeed, Singapore recognizes the UNFCCC as the competent body to deal with climate change.

Singapore has further pointed out that the paper was neither about carbon taxes and border tax adjustments *per se*, nor was it meant to advocate the drafting of rules on these measures. Instead, these measures were used as examples to: (i) raise awareness among WTO experts in the CTE that there were trade-related

proposals tabled at the UNFCCC, and where these proposals deal with trade rule-making, the WTO was the competent body to address them; and (ii) initiate a dialogue to promote the mutual supportiveness between WTO rules and climate measures, and ensure that trade-related climate measures were WTO consistent and applied in a manner so that they do not create barriers to international trade.<sup>177</sup>

On the issue of market access for environmental goods, when delegations were asked to work on the elements of coverage to which treatment modalities would apply, Singapore partnered with several developed and developing countries to work on potential compromises. Together with the delegations of Australia, Colombia, Hong Kong-China and Norway, Singapore proposed the hybrid approach - an attempt to bridge the existing approaches on the table, from the request and offer proposal, to the core list approach and the project or integrated approach. It essentially suggested that members agree on a limited core set of tariff lines or products from the reference universe that would be mandatory for all members. This would then be complemented by a supplementary or complementary list, as well as by request and offer, and project approaches based on the reference universe.<sup>178</sup>

### China

When border measures were discussed at the 10 July 2009 meeting, China, together with India, stressed that border measures and taxes are anti-competitive and unilateral, and contrary to the mandate of seeking a multilaterally agreed and coordinated approach to carbon leakage. China also raised concerns that the WTO-UNEP report could be read as providing a green light on the WTO consistency or validity of such border measures under certain conditions.<sup>179</sup>

Singapore’s proposal mentioned above prompted a strong reaction by China, with the country firmly stating that carbon charges and taxes are illegal under WTO law, and that the CTE ought not to serve as a forum for an issue outside the ambit of the committee’s mandate.<sup>180</sup>

Speaking on the issue of market access and carbon footprint requirements, China, together with Saudi Arabia, Argentina, Turkey and Colombia, expressed concerns about the difficulty of determining an objective basis for a product's carbon footprint. According to China and these countries, this difficulty would only provide further grounds for concerns that carbon-related standards, whether voluntary or government-imposed, could be used as a means for restricting trade or exports, particularly from developing countries.<sup>181</sup>

Already back in 2007, the Chinese delegation had voiced serious concerns in the committee meetings about the increasing use of environment-related product requirements and standards:

China said that in recent years, environmental requirements had posed serious challenges to developing countries' exports, including those from China. Three trends could be observed on new environmental requirements. First, they tended to relate to processes and production methods (PPMs) rather than end products. They usually targeted sectors and products that developed countries had stopped producing, but of trade interests to developing countries. Finally, these new requirements prepared by one country could create a domino effect encouraging other countries to follow, which in turn would increase the difficulties faced by developing countries.<sup>182</sup>

In addition, technology transfer - flows of know-how, experience and equipment - is a priority issue for China. The country has stressed the importance that IPRs do not become barriers for technology transfer. The issue of technology sharing and transfer is interestingly an area where China has signalled an acceptance of linking the negotiations in the WTO and the UNFCCC. The country has further proposed linkages between the WTO and the Climate Technology Centre Network (CTCN) currently being conceptualized under the UNFCCC as one of the means to implement technology transfer commitments. As one step further, China proposed the creation of

a Trade and Environment Fund that could finance joint research and development, and facilitate transfer of environmentally sound technologies and the like at reasonable prices.<sup>183</sup>

## India

On the issue of border carbon adjustment measures, India has clearly stated its view that it considers border measures and taxes anti-competitive and unilateral, and further sees them as a contradiction to the mandate of developing a multilateral and coordinated approach to the problem of carbon leakage. India has also raised its concern about the possibility that the WTO-UNEP report could be interpreted in a way that establishes WTO consistency or validity of border carbon adjustment measures under certain conditions. In this respect, India pointed to the adverse impacts of border measures on developing countries by stressing that "WTO-inconsistent trade measures would reduce development prospects for developing countries".<sup>184</sup>

India, together with Brazil and Saudi Arabia, further joined China in expressing its reservations to Singapore's proposal, arguing that the matter should first be dealt with at the UNFCCC, also claiming that the information and awareness on this issue had already been provided through the issuance of the WTO-UNEP report in 2009.<sup>185</sup>

In 2007, India was also already vocal in the committee meetings in expressing its concerns about the increasing use of environment-related product requirements and standards:

[India] said that [...] since governments had no role in setting private standards, these standards were not notified to the TBT Committee. Second, on market access, private standards inclined to fragment the market, since each private buyer had its own standard, it became burdensome for producers to cater to different standards under the same production facility.<sup>186</sup>

As mentioned above, the negotiations on environmental goods, as mandated by the DDA, have been marked by a fundamental

divide between developed and developing countries. India has been particularly vocal in this context, arguing that the outcome needs to involve more than a reduction of tariffs and non-tariff barriers. India further pointed out that the outcome needs to demonstrate clear environmental and development benefits. In this regard, India stressed that “the mandate of Paragraph 31 (iii) is essentially environmental-benefit oriented, and market access is a means to that objective; not the objective itself”.<sup>187</sup> In this context, India proposed the project approach, whereby concessions would be made on a project by project basis.<sup>188</sup>

India, like China, also underlined the importance of technology transfer for climate change actions in developing countries and the need to ensure that IPRs do not become barriers to the transfer of environmentally-friendly technologies. Together with China, India further proposed the linking of the WTO with the CTCN as a way to arrive at technology transfer commitments, as well as the creation of a Trade and Environment Fund for financing joint research and development, and facilitating technology transfers, as described above.

#### Saudi Arabia

Saudi Arabia was another country to express reservations to Singapore’s proposal on border tax adjustments, arguing that the issue should first be dealt with at the UNFCCC. Speaking on developing country issues specifically, Saudi Arabia stressed that “any discussion of this issue in the CTE could be used to justify the imposition of border measures, which would disadvantage developing country Members”.<sup>189</sup>

Regarding market access and carbon footprint labeling, Saudi Arabia was part of the group of countries that have highlighted the difficulties involved in determining an objective basis for products’ carbon footprints and that this would lead to concerns that carbon-related standards could be used for restricting trade, especially from developing countries.<sup>190</sup>

#### Argentina

In the context of the negotiations on the elimination of barriers to trade in environmental goods mandated by the Doha Ministerial Declaration, Argentina proposed the linking of climate change mitigation to the negotiations in the CTESS. This is pointed out in an Argentinean submission entitled *The Doha Round and Climate Change*:

The WTO negotiations to eliminate barriers to trade in environmental goods and services should therefore be aimed primarily at facilitating access to goods and services that are used in climate change mitigation and adaptation projects. This would help to reduce the costs of projects relating to action against climate change, which might help to stabilize greenhouse gas concentrations at a level that would prevent anthropogenic interference with the climate system [...]

The work of the CTESS should therefore be aimed at establishing synergies between the climate change regime and the multilateral trading system, so as to enhance mutual supportiveness between trade liberalization objectives, environmental protection and sustainable development.<sup>191</sup>

Argentina has further called for giving trade liberalization priority to goods, services and technologies imported for projects under the Clean Development Mechanism of the Kyoto Protocol, as this could provide an important contribution to combating climate change. The country has also underlined the importance it attaches to technology transfer for climate change purposes by stressing the need “to develop effective technology transfer mechanisms within the WTO”.<sup>192</sup>

In the discussions on market access for environmental goods, Argentina made clear that the outcome must go beyond the reduction of tariffs and non-tariff barriers, and that it needs to demonstrate a clear environmental

and development benefit. In this context, Argentina proposed the integrated approach, a combination of the list approach and India's proposal for a project approach.<sup>193</sup>

### **Brazil**

Brazil was part of the countries who argued that the issue of border tax adjustments should first be dealt with at the UNFCCC, hence expressing reservations to Singapore's proposal on that matter.

Moreover, the above-mentioned divide between developing and developed countries over the market access focus was in no small measure attributable to the strong advocacy led by Brazil for a mercantilist anchor to the negotiations. This was to ensure that developing countries get compensated for providing further tariff concessions, coupled with the policy space dimension that speaks to developing their national industries in the environmental sector. This runs however counter to developed members approaching the problem from a tariff reduction or elimination perspective.<sup>194</sup>

### **Mexico and Chile**

When working on approaches for coverage in the area of market access for environmental goods, Mexico and Chile suggested the combined approach.<sup>195</sup> At the core of this compromise proposal was the integration of special and differential treatment in the element of coverage: developed countries would automatically select more lines from the reference universe than developing countries.

### **The Africa Group**

Technical assistance and capacity building is an area of great importance to many developing countries. In this regard, the Africa Group proposed that the outcome on technical assistance and capacity building should enhance technical assistance to developing countries relating specifically to the implementation of STOs set out in MEAs. The outcome should further provide for a group of experts on trade and environment who would be "available on a

priority basis to least-developed and developing countries as a complement to existing technical assistance mechanisms".<sup>196</sup> This position was also shared by the ACP Group<sup>197</sup> - a group of African, Caribbean and Pacific countries that enjoy trade preferences in the EU.

## **5.5 Analysis and Recommendations**

The linkages and intertwining of trade, the environment and sustainable development policies is established and irreversible within the WTO. Since its inception, the CTE has had opportunities to discuss the impact - positive or negative - of trade policies and trade agreements in generating greater or lesser carbon emissions. The CTE also had the opportunity to address the issue of the technical complexity relating to calculating the embedded carbon in traded goods, and the controversial issue of carbon related charges and taxes. The tone and mood in the committee work can be said to have evolved and shifted from its early beginnings of a north-south perspective on climate-related issues to a more engaged debate focusing on expertise on how to best coordinate the intersection of trade and climate change mitigation measures. This shift can be particularly observed since the release of the WTO-UNEP report on trade and climate change. It becomes evident that the work at the CTE within its original terms of reference and core objective of achieving a coordinated approach to trade and climate change mitigation measures will only increase in quality and breadth with or without additional input or results from the mandated negotiations in the CTESS.

In the CTESS, which is drafting new trade rules, the negotiations demonstrated the ability to generate various levels of cooperative or creative consensus among developing countries and their developed partners. Regarding the mandate for increased cooperation and coordination in the field of MEAs, it is hoped that the draft CTE Decision II will bear fruit in the near future as an early deliverable, as it was the case in the 8th Ministerial Conference where ministers approved the services waiver for LDCs.<sup>198</sup>

Discussions on the market access component have become irretrievably intertwined with the demands of developing countries that technical assistance as well as technology diffusion and transfer have to be part of the negotiations. The way is open to craft an agreement outside the WTO among a coalition of the willing, or within the WTO as a plurilateral agreement similar

to the Information Technology Agreement or the new Government Procurement Agreement. If developed partners bite the bullet and address the technology issue from a partnership perspective an agreement might ideally be reached through a new multilateral accord on trade and environment goods technologies and services.

## 6. CONCLUSIONS AND RECOMMENDATIONS

Trade and climate change are intrinsically linked, and so are the policies governing them. This irrefutable nexus is illustrated by the fact that the three parallel processes examined in this paper - the UNCSO, the UNFCCC and the WTO - all touch upon it. They do so in different ways and with different mandates, but they build on a common understanding that the measures undertaken should not “constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade”.<sup>199</sup>

In spite of these mandates, any real progress on making decisions that would allow trade to significantly contribute to climate change action is at this point lacking. Negotiations on improved market access for environmental goods and services, which encompass a narrower range of climate-friendly products, have seen some progress in the WTO, but are now being held hostage to the stalemate of the DDA. The upcoming Rio+20 Conference could be another channel for taking positive action with respect to trade as a tool for sustainable development. The recent “zero draft” of the outcome of the Rio+20 Conference calls for a more transparent and open trading system to contribute to the stability of food prices and domestic markets. Similar language could be used in the section referring to energy. Indeed, many obstacles remain to trade in sustainable energy goods and services.<sup>200</sup> Addressing these would be an important step to enhance access to energy for all, as well as to promote energy security and, not the least, contribute to climate action. In the section on trade, there is special mention of an eventual phase out of market distorting and environmentally harmful subsidies, including fossil fuels. A positive contribution of Rio+20 in this field - which would necessarily need to include special provisions taking the needs and concerns of the poor into consideration - would be an important step towards addressing climate change. Having said this, it is important that any references of this kind be linked to a clear plan of action in order to ensure an effective implementation.

Interestingly, a defensive trade agenda, related to the risk that climate change action will impair trade, is present over the three negotiation processes examined in this paper. In the Rio+20 context, the concern among developing countries that the concept of “green economy” will lead to “green protectionism” is so spread that it risks undermining much of the process. In the UNFCCC context, discussions about trade have to a great extent been reduced to this concern, with a particular emphasis on “unilateral measures”. Even in the WTO, discussions on climate change in the CTE have focused on the defensive agenda, more specifically on carbon standards and labeling, and on border measures. As these concerns are so widely spread, allowing a space for discussions on trade concerns related to climate action is crucial. Indeed, the concerns about distortions to the competitive position of domestic industries, and an uncertainty regarding what measures are allowed or prohibited under current trade rules to mitigate such distortions, have for a long time held back countries from taking effective action. In order for the international community to step up mitigation actions it is crucial that these concerns are addressed.

Although the three fora examined in this paper all have, to varying degrees, mandates to deal with trade and climate change, there is also a widespread perception that no forum really attends to the issues at stake. The Director General of the WTO has for a long time advocated for a “wait and see” approach. According to this approach, it would be up to the UNFCCC to make decisions on climate change action, after which the WTO would deal with any trade concerns arising from such a deal. Similarly, in the UNFCCC delegates are generally reluctant to deal with trade. In addition to the fact that many of the delegates lack training and understanding of trade policy, developed countries in particular refer such discussions to the WTO as the appropriate forum. Whereas trade has been put forward by developing countries as one item to be dealt

with in the newly adopted forum on the impact of response measures under the UNFCCC, this has largely been met with scepticism by developed countries. This can be attributed to the perception that the concept of “response measures” has traditionally been linked to claims of compensation for the foreseen reduction in demand of fossil fuels by major oil producing countries - an agenda for which there is little appetite in most countries. In the preparations to the Rio+20 Conference trade is on the agenda, although the focus in the early process has been on other issues.

The bouncing of trade and climate issues between fora, or “forum shopping”, has to some degree prevented a substantial discussion in all. While determining the right forum to host discussions on the trade and climate change linkages is a difficult challenge, it is crucial to provide a space where discussions on these interlinkages can take place. A recommendation emerging from this analysis is hence that it may be useful, for developed countries in particular, to engage in discussions when and where this is being requested by developing countries, such as the response measures forum, even if it is not the preferred venue by developed countries. Indeed, dismissing the forum on grounds related to the perception that it primarily serves the interest of oil-producing countries would be a mistake. There is today a broad support for the forum among developing countries.

The findings of this paper show that when discussions on trade do take place, it allows for countries, including developing countries, to better articulate their positions. This has for example been the case during the June 2011 workshop on response measures in Bonn, where the Africa Group presented its elaborate views on the need to engage in systematic and coherent discussions to identify climate change measures that bear risks for trade and to find ways for minimizing such risks. Within the WTO, the specific trade and environment mandate of the CTESS has also led to the emergence of some prolific views among several developing countries. Argentina, for example, called for facilitating access to goods and services used

in projects for climate change mitigation and adaptation, as well as for trade liberalization priority for technologies used under the Clean Development Mechanism. Discussions within the CTESS have further resulted in concrete proposals by China and India on the issue of technology, such as the suggestion to link the WTO and the UNFCCC’s emerging Climate Technology Centre Network, or the proposed establishment of a Trade and Environment Fund.

A more nuanced articulation of views and positions is crucial given that it would necessarily be based on a better understanding of the individual needs and concerns of the domestic economies, thereby allowing individual countries to prepare better policy responses. In addition, it can contribute to mitigating fears and concerns that may be overly emphasized due to a lack of access to facts and analysis. Moreover, if countries achieve a deeper understanding of their own concerns, this may allow them to engage in constructive alliances reflecting common interests. A strong polarization between typically developed and developing countries is likely not helpful in the context of climate change. Different countries have too differing interests, depending on the structure of their economies, the physical and economic vulnerability to climate change and related policies, the contribution to global emissions and hence abatement opportunities, as well as external pressure to take mitigation action.

Over the coming years, it is likely to expect a changing landscape regarding developing country alliances, at least in the context of the UN. Indeed, a first, important weakening of the principle of common but differentiated responsibility was taken in Durban in 2011, where a decision was made that the new protocol, legal instrument or agreed outcome will be applicable to *all countries*, with legal force. In addition, there was no reiteration of the principle of common but differentiated responsibilities. It will have to be defined over the coming years what this will mean, and the topic can be expected to generate heated debates. However, this outcome is the first step

away from treating all developing countries the same, namely entirely exempting them from emission reduction commitments. Indeed, the explicit, underlying agenda of the EU as it advocated for a roadmap to include all major emitters in future mitigation efforts in exchange for a renewed commitment to the Kyoto Protocol was to increase the mitigation ambition of emerging economies in particular. Against this backdrop, it is fair to assume that an alliance such as the G77 and China, which has largely been held together by the least common denominator that members are all developing countries, will be increasingly challenged, as the concept of “developing country” may not necessarily mean an exemption from mitigation commitments anymore. Similarly, the BASIC Group, which has had a strong common voice on trade in the UNFCCC, lost a considerable amount of unity during the final days of the Durban Conference, where India was standing out with a position quite distinct from the other group members.

In the WTO, developing countries are less inclined to join in large alliances when discussing climate change. The alliances predominant in the UN system do not have a strong presence in the WTO. Instead, this paper shows how developing countries sometimes share interests with developed countries, refuting reductionist analysis that tend to set developing and developed countries in opposite extremities from the start.

In addition to the recommendation to respond to calls for a conceptual discussion about trade and climate change linkages, and in particular about concerns regarding the potential negative impact on trade from climate change action, findings of this paper lead to the recommendation that countries should engage in a discussion about defining the roles of the different fora with respect to the trade and climate interlinkages. Similar processes have been called for in Rio in 1992 to clarify the roles of multilateral fora on trade and environment, as well as in the DDA, but the efforts may need to be stepped up. Defining which issues belong in which forum implies a number of advantages.

First, it is understandable that it is difficult to come to a consensus about which process should assume responsibility for the complete trade and climate change nexus - something that has led to the above-mentioned shying away from the issues by some, and a risk of forum shopping by others. In addition, it would likely be extremely challenging for any process to take on that whole agenda. Some issues are so controversial that it would risk preventing any positive movement on less political but yet significant issues. Dividing the issues between the fora could therefore be a more constructive way forward. Recommendations on which forum should incorporate which issues could be the topic for another research paper, but a few intuitive suggestions would be that the WTO steps up its efforts in the implementation of:

- trade rules (for example, by clarifying the applicability of the TBT agreement to carbon standards and labels, including to private labels and, if applicable, ensuring that countries respect their engagements with regards to monitoring and regulating manufacturing standards for products sold and produced within their territory);
- multilateral trade reform (such as liberalization of trade in environmental goods and services to increase their availability and lower their cost);
- trade rule making (if current rules are not supportive of climate change action, the WTO should take the lead in working on agreeing on new rules); and
- transparency (such as ensuring that climate standards are duly notified).

The CTE thus has a potentially important role to play in addressing climate change. This has been somewhat underutilized, partly due to the phenomenon of bouncing the issues back and forth. A recommendation stemming out of this paper is therefore that member states strive to optimize the work of the CTE in terms of climate change, and not to let the whole of the WTO being held hostage to the stalemate of the Doha Round.



The UNFCCC provides a valuable opportunity to discuss some of the specific trade concerns countries, in particular developing ones, may have. Therefore, the UNFCCC could:

- provide a forum for analyzing trade-related impacts of response measures on climate change and work on identifying guidelines or “best practice”;
- review mitigation actions by countries and analyze the potential impact on trade, with a view to minimize distortions;
- address the need to better understand the link between concerns for carbon leakage and distortions in competitiveness, so as to stimulate an enhanced level of ambition with respect to mitigation; and
- promote the transfer of technology related to climate change mitigation and adaptation, including through trade.

The UNCSO represents a valuable forum to send strong political signs to be further advanced by countries under the WTO and UNFCCC fora. In this regard, Rio+20 could be an opportunity to:

- promote trade in sustainable energy goods and services, or in climate-friendly goods and services more broadly, by launching a process to identify obstacles to trade and to explore options for addressing these;
- provide an international knowledge-sharing platform to facilitate countries’ green economy policy formulation and implementation, in articulation with similar initiatives already in place. Such a platform could also provide for a set of general guidelines and best practices with respect to trade as an enabling element of the green economy;
- discuss the eventual establishment of a forum for international cooperation on trade-related green economy issues, providing regular consultation and information exchange between countries and other stakeholders; and

- analyze how Sustainable Development Goals and/or a Green Economy Roadmap (if decided to be adopted) could positively support the interfaces between trade and climate change.

This list is by no means exhaustive. Rather, it serves to provide examples of how a division of responsibilities could look like, with a view to making sure that the concerns of developing countries are accommodated by a forum and other mechanisms where they can be duly considered.

In addition to the three processes analyzed in this paper, it is crucial that countries engage in discussions about trade and climate change in smaller, ad hoc groupings. In spite of the beauty of multilateralism, it is well recognized that it is an enormous challenge to make progress when every single country has to agree. This has become painfully obvious over the past decade, not least in the WTO with its DDA and in the UNFCCC, most notably at the COP in Copenhagen in 2009. Indeed, bridge-building dialogue and the seeking of compromises between key countries must necessarily precede multilateral progress. Therefore, it is recommended that a constructive dialogue be held between progressive developed countries and some of the developing economies that are key for climate change mitigation and give strong priority to trade issues. In this context, it seems particularly important to seek a dialogue with the BASIC countries. India in particular is vocal on trade and climate change linkages. Engaging in a dialogue with India can allow developed countries to better understand some of the concerns held by India and shared by many other developing countries. Similarly, Argentina is a very active country in all three fora in relation to the trade and climate nexus, and moreover often acts as a spokesperson for larger groups of developing countries. Considering Argentina in bilateral discussions on these issues would therefore be important for developed countries.

On a related note, when it comes to ad hoc discussions on trade and climate change, developed countries could engage in discussion

with key emitters among the emerging economies in discussions about the “positive” agenda of allowing for trade to contribute to climate change action. One example could be to negotiate an agreement to address obstacles to trade in sustainable energy goods and services, as discussed in the preparations of the Rio+20. Any initiatives taken along these lines could then be incorporated into a multilateral process, either the WTO or the UNCSD. Having

the major emerging economies on board would be crucial in order for such an agreement to be effective in addressing emissions. However, in this paper we have seen that the AOSIS and in particular Singapore have expressed a priority for understanding the positive dimension of trade in climate change action and for using trade as a tool for climate change mitigation. Inviting these countries to join in discussions should therefore be encouraged.

## ENDNOTES

- 1 The CBDR principle implies that differentiation between the parties under the UNFCCC shall take into account their historical level of anthropogenic emissions of greenhouse gases, as per the preamble language of the convention and as such under article 4.6 (for Annex I Parties that were undergoing process of economic transition). Under Article 4.1 it is indicated that for defining commitments to all Parties, it is necessary to consider “their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances.”
- 2 Whereas an intergovernmental focus is here adopted, it is pertinent to stress that non-state actors also play an important role in trade and climate change negotiations.
- 3 UNFCCC, Convention, Art. 1, para. 2 (1992).
- 4 UNEP, *Green Economy - Developing Countries' Success Stories*, p.5 (2010).
- 5 ICTSD, *The Trade and Climate Change Linkages* (2011).
- 6 See, for example, Grossman and Krueger (1992).
- 7 CO<sub>2</sub> is the main anthropogenic greenhouse gas that affects Earth’s radiative balance. It is a naturally occurring gas, and a by-product of burning fossil fuels or biomass, of land-use changes and of industrial processes. (IPCC, *Climate Change 2007: Impacts, Adaptation and Vulnerability*. Cambridge University Press, 2007).
- 8 Sustainable energy encompasses solar, wind, small-scale hydro and biomass-related fuels, technologies and services, but could broadly relate to any energy source that has the potential to mitigate GHG emissions. See ICTSD, *Fostering Low Carbon Growth: The Case for a Sustainable Energy Trade Agreement*, Geneva: International Centre for Trade and Sustainable Development, 2011.
- 9 Monkelbaan, *Transport, Trade and Climate Change: Carbon Footprints, Fuel Subsidies and Market-Based Measures* (2011).
- 10 UNEP, *Action Plan for the Human Environment*, (1972). Recommendations 103, 104 and 105. See Annex I for more detailed information.
- 11 See Recommendation 104 in Annex I.
- 12 Published in 1987 by the World Commission on Environment and Development, commonly known as the ‘Brundtland Commission’, named for its chair Gro Harlem Brundtland.
- 13 In addition, two important international agreements were opened for signature: the Convention on Biological Diversity and the Framework Convention on Climate Change. The United Nations Convention to Combat Desertification (UNCCD) was also a result of Rio 1992, although it was only adopted and opened for signature in 1994.
- 14 UN, AGENDA 21 (1992).
- 15 UNCSD, *The Future We Want* (2012).
- 16 Barbier (2010).
- 17 UN, General Assembly, A/CONF.216/7, para. 5 (2010).

- 18 UNEP, *Towards a Green Economy - Pathways to Sustainable Development and Poverty Eradication* (2011).
- 19 UNCTAD, UNCTAD/DITC/TED/2010/2 (2010).
- 20 Khor (2010).
- 21 UNCTAD, UNCTAD/DITC/TED/2010/8 (2011).
- 22 Cosbey (2010).
- 23 Vihma (2010).
- 24 Ibid.
- 25 Group of 77 and China, UNCSO, *Submission by the Group of 77 and China for the compilation document of the United Nations Conference on Sustainable Development (RIO+20)* (1 November 2011).
- 26 Ibid.
- 27 China, UNCSO, *National Submission of the People's Republic of China on the UN Conference on Sustainable Development in 2012* (28 October 2011).
- 28 Ibid.
- 29 Ministry of Environment and Forests, Government of India, UNCSO, *Inputs for the Secretary-General's Report to the Second Preparatory Committee of UNCSO* (3 November 2010).
- 30 Bolivia, UNCSO, *Proposal of the Plurinational State of Bolivia for the United Nations Conference on Sustainable Development* (1 November 2011).
- 31 Venezuela, UNCSO, *Contributions of the Bolivarian Republic of Venezuela to the Draft Final Document of the United Nations Conference on Sustainable Development* (1 November 2011).
- 32 Ibid.
- 33 Brazil, UNCSO, *Submissions by Brazil to the Preparatory Process Rio+20 Conference* (1 November 2011).
- 34 Argentina, UNCSO, *Inputs for the compilation document to serve as a basis for the preparation of the outcome document of the Conference on Sustainable Development* (31 October 2011).
- 35 League of Arab States, UNCSO, *Outcome of the Arab Regional Preparatory Meeting for the United Nations conference on Sustainable Development* (1 November 2011).
- 36 African Union, UNCSO, *Africa Consensus Statement to Rio+20* (1 November 2011).
- 37 African Ministerial Conference on the Environment (AMCEN), fourth special session, AMCEN/SS/IV/3 (19 September 2011).
- 38 See Africa Consensus Statement to Rio+20 above.
- 39 United Nations General Assembly Resolutions 64/236 and 65/152 have established three preparatory meetings (PrepComs) for Rio+20. The first one in 2010, the second one in 2011 and the third one immediately prior to the Conference in 2012. In addition, there were complementary processes held at multiple levels.

- 40 See UNCTAD/CITC/TED/2010/8 above. (2011)
- 41 See UNCSD, *The Future We Want* above.
- 42 The GGKP embodies a core partnership between the Global Green Growth Institute (GGGI), the Organization for Economic Co-operation and Development (OECD), the United Nations Environment Program (UNEP), and the World Bank. Its mission is to “enhance and expand efforts to identify and address major knowledge gaps in green growth theory and practice, and to help countries design and implement policies to move towards a green economy.” See Green Growth Knowledge Platform at <http://www.greengrowthknowledge.org>.
- 43 UNFCCC, Convention, Art. 2 (1992).
- 44 While emission reductions units trading under the Kyoto Protocol (or other voluntary trading schemes) are not considered in this paper, it is pertinent to acknowledge their relevance for many developing countries. In Brazil, for example, the Clean Development Mechanism (CDM) is estimated to attract external resources of approximately USD 5.8 billion during the first commitment period of the Kyoto Protocol (2008-2012). In 2009, Certified Emission Reductions (CERs) from CDM project activities would be ranked 16th if considered part of the Brazilian export portfolio. See *Second National Communication of Brazil to UNFCCC* (2010), Figure 4.7. Available from [http://www.mct.gov.br/upd\\_blob/0215/215084.pdf](http://www.mct.gov.br/upd_blob/0215/215084.pdf).
- 45 The CBDR principle implies that differentiation between the parties under the UNFCCC shall take into account their historical level of anthropogenic emissions of greenhouse gases, as per the preamble language of the convention and as such under article 4.6 (for Annex I Parties that were undergoing process of economic transition). Under Article 4.1 it is indicated that for defining commitments to all Parties, it is necessary to consider “their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances.”
- 46 UNFCCC, Convention, Art. 3, para. 5 (1992).
- 47 UNFCCC, Kyoto Protocol to the United Nations Framework Convention on Climate Change, Art. 2, para. 3 (1998).
- 48 Ibid, Art.3, para.14.
- 49 UNFCCC, FCCC/KP/CMP/2005/8/Add.4 (30 March 2006).
- 50 Article 3.1 of the Kyoto Protocol states that “the Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts, with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012.”
- 51 Stern, *The Economics of Climate Change: The Stern Review* (2007).
- 52 UNFCCC, FCCC/CP/2007/6/Add.1 (14 March 2008).
- 53 Based on interviews with climate negotiators undertaken by ICTSD in 2010-2011.
- 54 UNFCCC, Draft decision [-/CP/17], *Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action* (2011).
- 55 The broad term “border carbon measures” is used here as it encompasses both border tax adjustment measures and the inclusion of imports into emissions trading schemes.

- 56 IPCC, AR4 (2007).
- 57 Campbell *et al.* (2011).
- 58 Ibid.
- 59 UNFCCC, Draft decision [-/CP.17], *Outcome of the work of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention* (2011).
- 60 See Monkelbaan above.
- 61 27 out of 53 countries of the Commonwealth are SIDS.
- 62 See Kyoto Protocol above, Art. 2, para. 2.
- 63 According to this principle, all ships are regulated equally regardless of where the ship is owned or registered.
- 64 UNCTAD, *Review of Maritime Transport 2007* (2007).
- 65 UN, Report of the Secretary-General's High-level Advisory Group on Climate Change Financing (2010).
- 66 See Monkelbaan above.
- 67 UNFCCC, Convention, Art. 4, para. 5 (1992).
- 68 Ibid. Art.4, para.7.
- 69 The Technology Mechanism is composed by the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN).
- 70 Abdel Latif (2010).
- 71 ICTSD, *The Climate Technology Mechanism: Issues and Challenges* (2011).
- 72 UNFCCC, FCCC/AWGLCA/2011/CRP.38 (7 December 2011).
- 73 TWN Bonn News Update (14 August 2009).
- 74 South Centre, *India, G77 Propose Text Against Trade Protection in Copenhagen Draft* (2009).
- 75 Seligsohn *et al.* (2009).
- 76 UNFCCC, FCCC/AWGLCA/2008/MISC.5 (27 October 2008).
- 77 UNFCCC, FCCC/AWGLCA/2011/CRP.6 (17 June 2011).
- 78 Oral statements by Argentina during sessions of the contact group on response measures.
- 79 UNFCCC, FCCC/AWGLCA/2011/CRP.5 (17 June 2011) and FCCC/AWGLCA/2011/CRP.14 (1 October 2011).
- 80 See FCCC/AWGLCA/2011/CRP.14 above.
- 81 Vihma (2010).
- 82 Zondi *et al.* (2011).

- 83 See FCCC/AWGLCA/2011/CRP.5 and FCCC/AWGLCA/2011/CRP.14 above.
- 84 Africa Group, *Statement by the Africa Group, presented to the Joint SBI/SBSTA forum on the impact of the implementation of response measures, convened by the Chairs of the SBI and the SBSTA*, 13 June 2011, Bonn, Germany.
- 85 UNFCCC, Joint Submission by African Group, Argentina, Brazil, China, India, Iran, Lebanon, Malaysia, Philippines, Thailand and Uruguay on SHARED VISION (2011).
- 86 See AMCEN/SS/IV/3 above.
- 87 Antigua and Barbuda, Bolivia, Cuba, Dominica, Ecuador, Nicaragua, St. Vincent, the Grenadines and Venezuela.
- 88 Favero and Rogate (2010); Vihma (2010).
- 89 Dimitrov (2010).
- 90 Favero and Rogate (2010).
- 91 Detsch (2010).
- 92 World Resources Institute (2010).
- 93 UNFCCC, FCCC/AWGLCA/2011/MISC.3 (21 March 2011).
- 94 UNFCCC, FCCC/AWGLCA/2011/CRP.23 (4 October 2011).
- 95 UNFCCC, FCCC/AWGLCA/2008/MISC.5/Add.2 (10 December 2008).
- 96 UNFCCC, FCCC/AWGLCA/2011/MISC.2 (21 March 2011).
- 97 See FCCC/AWGLCA/2008/MISC.5/Add.2 above.
- 98 See FCCC/AWGLCA/2011/MISC.2 above.
- 99 Ibid.
- 100 UNFCCC, Submission by the Bolivarian Republic of Venezuela for a decision of COP on item 3.2.6 on economic and social consequences of response measures (2011).
- 101 Ibid.
- 102 Ibid.
- 103 See for example the *AOSIS Durban Release, AOSIS Rejects Delay Until 2020 - Demands Urgency for climate agreement*, 28 November 2011.
- 104 For more in-depth analysis, see Robert Read, *Trade, Economic Vulnerability, Resilience and the Implications of Climate Change on Small Island and Littoral Developing Economies*, Geneva: International Centre for Trade and Sustainable Development, 2010.
- 105 UNFCCC, Submission by Grenada on behalf of The Alliance of Small Island States to the Ad-Hoc Working Group on Long-Term Cooperative Action under the Convention (April 2011); Submission by Grenada on behalf of the Alliance of Small Island States to the Subsidiary Body on Implementation (April 2011).
- 106 See FCCC/AWGLCA/2008/MISC.5/Add.2 above.

- 107 UNFCCC, FCCC/SB/2011/MISC.2 (6-16 June 2011), FCCC/AWGLCA/2011/CRP.30 (6 October 2011) and FCCC/SB/2011/MISC.4/Add.1 (2011).
- 108 UNFCCC, FCCC/AWGLCA/2011/CRP.30 (2011).
- 109 See FCCC/SB/2011/MISC.4/Add.1 above.
- 110 See for example FCCC/AWGLCA/2011/CRP.5 above.
- 111 See FCCC/SB/2011/MISC.4/Add.1 above.
- 112 Econ Pöyry (2011).
- 113 CAIT at World Resources Institute, available from: <http://cait.wri.org/>. Accessed on 12.01.2012.
- 114 For a detailed analysis on the BASIC group, see Hallding, K. et al. (2011).
- 115 Econ Pöyry (2011).
- 116 See FCCC/AWGLCA/2011/CRP.5 above.
- 117 BASIC, *Joint statement issued at the conclusion of the seventh BASIC Ministerial meeting on Climate Change* (2011).
- 118 BASIC, *Joint statement issued at the conclusion of the eighth BASIC Ministerial meeting on Climate Change* (2011).
- 119 UNFCCC, FCCC/AWGLCA/2011/CRP.22 (4 October 2011).
- 120 BASIC, *Joint statement issued at the conclusion of the sixth BASIC Ministerial meeting on Climate Change* (2011); FCCC/AWGLCA/2011/CRP.5 above; FCCC/AWGLCA/2011/CRP.22 above.
- 121 See FCCC/AWGLCA/2011/CRP.5 above.
- 122 BASIC (2011), *Joint Statement Issued at the Conclusion of the Ninth BASIC Ministerial Meeting on Climate Change* (2011).
- 123 See FCCC/AWGLCA/2011/CRP.22 above.
- 124 India, UNFCCC presentation. Available from: [http://unfccc.int/files/cooperation\\_support/response\\_measures/application/pdf/india.pdf](http://unfccc.int/files/cooperation_support/response_measures/application/pdf/india.pdf). Accessed on 12.01.2012.
- 125 UNFCCC, FCCC/CP/2011/INF.2 (21 September 2011).
- 126 India stressed the need for “a facilitative IPRs regime that balances rewards for the innovators with the common good of humankind and thereby enables developing countries to take early and effective mitigation and adaptation actions at the national level.” UNFCCC, FCCC/CP/2011/INF.2/Add.1 (21 September 2011).
- 127 League of Arab States, UN, *Arab Region State of Implementation on Climate Change*, p.16 (2005).
- 128 See FCCC/AWGLCA/2011/CRP.5 and FCCC/AWGLCA/2011/CRP.14 above.
- 129 Written input by Saudi Arabia on behalf of India, China, Iran, Venezuela, Argentina and the Arab Group under LCA agenda item 3.2.6 (7 December 2011).



- 130 OPEC has 12 Member Countries: Algeria, Angola, Ecuador, Iraq, Iran, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, UAE and Venezuela.
- 131 OPEC, UNFCCC presentation (13 June 2011). Available from: [unfccc.int/files/cooperation\\_support/response\\_measures/application/pdf/opec.pdf](http://unfccc.int/files/cooperation_support/response_measures/application/pdf/opec.pdf). Accessed on 15.01.2012.
- 132 See FCCC/SB/2011/Misc.4/Add1 above.
- 133 Ibid.
- 134 The prior GATT was not always seen as prioritizing issues of environment or development. See for example, Steve Charnovitz, *The WTO's Environmental Progress*, Journal of International Economic Law Vol. 10 (3) (2007) for a brief discussion of the GATT-era attitude and the relevant provisions relating to exceptions for environmental matters. See also Michael M. Weinstein and Steve Charnovitz, *The Greening of the WTO*, Foreign Affairs (November 2001).
- 135 WTO, Marrakesh Agreement Establishing the World Trade Organization (1994).
- 136 WTO, Decision on Trade and Environment (1994).
- 137 Ibid.
- 138 WTO, US Shrimp, WT/DS58/AB/R, para. 130 (12 October 1998).
- 139 WTO, *US Gasoline*, WT/DS2/AB/R, p.30 (29 April 1996).
- 140 Ibid.
- 141 There is sometimes criticism that the approach effectively renders WTO law superior to domestic law, and in certain cases domestic environmental laws, which by definition of international treaty law it must necessarily be. Article 26 of the Vienna Convention on the Law of Treaties states the fundamental rule of *pacta sunt servanda*: Every treaty in force is binding upon the parties to it and must be performed by them in good faith. See also *US Shrimp* above.
- 142 WTO, *US Gasoline*, WT/DS/9 (20 May 1996).
- 143 WTO, *China Raw Materials*, WT/DS394/395/398/R (5 July 2011).
- 144 Ibid., p. 143.
- 145 WTO, *China Raw Materials*, WT/DS394/395/398/AB/R (30 January 2012).
- 146 Canada - Certain Measures Affecting the Renewable Energy Generation Sector, DS412, and Measures Relating to the Feed-in Tariff Program, DS 426. Issues relating to prohibited subsidies are also involved. For a more extensive analysis of WTO Subsidy Rules in connection with the Renewable Energy Sector, see a recent paper by Marie Wilke, *Feed-in Tariffs for Renewable Energy and WTO Subsidy Rules: An Initial Legal Analysis*, Geneva: International Centre for Trade and Sustainable Development, 2011. It is also of note that there are related developments in the realm of domestic trade remedy/defence actions not yet in the WTO, based on allegations of illegal subsidies and dumping put forward by United States producers against their Chinese solar industry competitors and vice versa. See for example Beijing AFP, "China days 'deeply concerned' over US solar ruling", 4 December 2011 at [http://www.solardaily.com/reports/China\\_says\\_deeply\\_concerned\\_over\\_US\\_solar\\_ruling\\_999.html](http://www.solardaily.com/reports/China_says_deeply_concerned_over_US_solar_ruling_999.html) and Reuters, "U.S. delays decision in China solar case until Feb", 23 December 2011 at <http://www.reuters.com/article/2011/12/23/us-usa-china-solar-idUSTRE7BM1KY20111223>.

- 147 WTO, Decision on Trade and Environment (1994).
- 148 Ibid.
- 149 In the early years up until recently, members have raised in the committee deliberations that issues relating to climate change were best tackled in the specialist organizations such as UNEP or the UNFCCC, and that the primary mandate of the WTO was focused on trade rules. See for example Reports of the Committee on Trade and Environment (1996 to 2004). In the 1996 report (WT/CTE/1, 12 January 1996) it was reported that views had been expressed that: “The WTO has no competence in the area of environmental matters *per se*, but it is concerned with trade measures applied pursuant to MEAs which can affect WTO Members’ rights and obligations.”
- 150 WTO, WT/CTE/16 (30 October 2009), Part V.A, paras. 14-15; WT/CTE/M/47 (31 August 2009), Part VI.A, paras. 69-103. See also WTO-UNEP Report, Trade and Climate Change, *supra* note 6, 2009.
- 151 This has been contained in the original mandate of work for the committee since 1994, but it was specifically highlighted as a priority item of work by ministers at the 4th Ministerial Conference at Doha, particularly in para. 32(i) of the Doha Ministerial Declaration, which first gave birth to the concept of the triple win for trade, the environment and development. See WTO, Doha Ministerial Declaration, WT/MIN(01)/DEC/1 (20 November 2001).
- 152 This was added to the committee’s work by ministers in Doha. See paragraph 33 of the Doha Declaration above.
- 153 See WTO-UNPE Report above, *supra* note 6; WT/CTE/M/47 above, Part IV.A.2 (Border Measures) at 98 et seq.
- 154 WTO, WT/CTE/17 (30 November 2010).
- 155 WTO, Doha Ministerial Declaration WT/MIN(01)/DEC/1, para. 31 (20 November 2001).
- 156 WTO, WT/CTE/W/160/Rev.5, TN/TE/S/5/Rev.3 (15 June 2011).
- 157 See for example WTO, TN/TE/W/72/Rev.1 (7 May 2007).
- 158 Ibid.
- 159 WTO, TN/TE/20, Annex I (21 April 2011).
- 160 Ibid.
- 161 Ibid.
- 162 Ibid.
- 163 See Doha Ministerial Declaration above, para. 31; see also WTO, *An Introduction to Trade and Environment in the WTO*, available from: [http://www.wto.org/english/tratop\\_e/envir\\_e/envt\\_intro\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envt_intro_e.htm). Accessed on 27.02.2012.
- 164 Much has been written over the years on the EGS negotiations and ICTSD has a series of working papers on this issue. See for example Veena Jha, *Environmental Priorities and Trade Policy for Environmental Goods: A Reality Check*, Geneva: International Centre for Trade and Sustainable Development, 2008; Rene Vossenaar, *Climate-related Single-use Environmental Goods*, Geneva: International Centre for Trade and Sustainable Development, 2010. Lynn

Mytelka, *Technology Transfer Issues in Environmental Goods and Services: An Illustrative Analysis of Sectors Relevant to Air-pollution and Renewable Energy*, Geneva: International Centre for Trade and Sustainable Development 2007; Vicente Paolo Yu III, *WTO Negotiating Strategy on Environmental Goods and Services for Asian Developing Countries*, Geneva: International Centre for Trade and Sustainable Development, 2007.

- 165 WTO, TN/TE/18 (18 July 2008); TN/TE/19 (22 March 2010).
- 166 WTO, JOB/TE/20 (21 April 2011).
- 167 See TN/TE/18 and TN/TE/19 above.
- 168 See TN/TE/20 above, Annex II.A.
- 169 Ibid.
- 170 See TN/TE/20 above. See also Documents from the negotiating chairs, 21 April 2011, available from: [http://www.wto.org/english/tratop\\_e/dda\\_e/chair\\_texts11\\_e/chair\\_texts11\\_e.htm](http://www.wto.org/english/tratop_e/dda_e/chair_texts11_e/chair_texts11_e.htm). Accessed on 27.02.2012.
- 171 See TN/TE/20 above.
- 172 See, *inter alia*, WT/CTE/14 (4 December 2007) and related documents, for example WT/CTE/M/44 (13 June 2007).
- 173 See WT/CTE/16 above, para. 4.
- 174 WTO, WT/CTE/M/49/Add.1 (28 May 2010).
- 175 Ibid., para. 7.
- 176 WTO, WT/CTE/W/248 (30 March 2011).
- 177 See WT/CTE/W/248 above; see also WT/CTE/18 (21 November 2011) and WT/CTE/M/52 (6 September 2011).
- 178 WTO, JOB/TE/15 (7 March 2011). See also Annex II of WT/CTE/W/248 above.
- 179 China stated that “carbon BTAs were not consistent with WTO rules, especially not with GATT Articles I and III [...], could not be justified under GATT Article XX as they were trade protectionist measures.” Additionally in China’s view, the WTO-UNEP Report had been misinterpreted to mean that that the WTO was supportive of carbon taxes at the border. See Report of the Meeting Held on 6 July 2011, WT/CTE/M/52 (6 September 2011) at para. 55. See also Report of the Committee on Trade and Environment, WT/CTE/16 (30 October 2009), Part V.A (Trade and Climate Change), paras. 14-15; Report of the Meeting held on 10 July 2009, WT/CTE/M/47 (31 August 2009), Part VI.A, paras. 69-103.
- 180 Ibid.
- 181 WTO, WT/CTE/M/49 (7 April 2010).
- 182 See WT/CTE/M/44 above, paras. 27-30.
- 183 WTO, TN/TE/W/79 (15 April 2011).
- 184 See Report of the Meeting held on 17 February 2010, WT/CTE/M/49 (7 April 2010), specifically deliberating on the Information Session on Product Carbon Footprint and Labeling Schemes held in the morning of 17 February 2010 at 14. See also Report of the Meeting Held on 6

July 2011, WT/CTE/M/52 (6 September 2011), and Report of the Committee on Trade and Environment, WT/CTE/18 (21 November 2011).

185 See WT/CTE/M/52 above.

186 See WT/CTE/M/44 above, paras. 27-30.

187 WTO, TN/TE/W/54, para. 2 (4 July 2005).

188 See TN/TE/W/54 and TN/TE/W/79 above.

189 See WT/CTE/M/52 above.

190 See WT/CTE/M/49 above.

191 WTO, TN/TE/W/74, paras. 2 and 4 (2009).

192 Ibid. paras. 7, 8 and 11.

193 WTO, TN/TE/W/62 (14 October 2005).

194 WTO, JOB(07)/146 (1 October 2007).

195 WTO, JOB/TE/16 (11 March) and JOB/TE/16/Corr. 1 (21 March 2011).

196 WTO, JOB (08)/38 (8 May 2008).

197 WTO, JOB/TE/14 (7 March 2011).

198 WTO, WT/L/847 (19 December 2011).

199 See UNFCCC Convention Art. 3, para. 5; Art. XX GATT 1994; Principle 16 Rio Declaration on Environment and Development.

200 For a more detailed analysis, see ICTSD, *Fostering Low Carbon Growth: The Case for a Sustainable Energy Trade Agreement* (2011).

## REFERENCES

### Articles, Books, Discussion Papers and Reports

- Africa Group, *Statement by the Africa Group, presented to the Joint SBI/SBSTA forum on the impact of the implementation of response measures, convened by the Chairs of the SBI and the SBSTA*, 13 June 2011, Bonn, Germany.
- African Ministerial Conference on the Environment (AMCEN), Fourth Special Session. *Report of the ministerial segment held on 15 and 16 September 2011*. Available from: [http://www.unep.org/roa/amcen/Amcen\\_Events/4th\\_ss/default.asp](http://www.unep.org/roa/amcen/Amcen_Events/4th_ss/default.asp). Accessed on: 27.02.2012.
- Barbier, Edward B. *A Global New Deal: Rethinking the Economic Recovery*. Cambridge: Cambridge University Press and UNEP, 2010.
- Campbell, Bruce, Wendy Mann, Ricardo Meléndez-Ortiz, Charlotte Streck and Timm Tennigkeit. *Addressing Agriculture in Climate Change Negotiations: A Scoping Paper*. Meridian Institute: 2011.
- Cosbey, Aaron. "Trade, Sustainable Development and a Green Economy: Benefits, Challenges and Risks". In *The Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective*. Prepared under the direction of UN-DESA, UNEP and UNCTAD, 40-68. 2010. Available from: <http://www.unctad.org/biotrade/DocsGE/GreenEcoFullReport.pdf>. Accessed on: 27.02.2012.
- Detsch, Claudia. *Lateinamerika vor dem Klimagipfel in Cancún: Gemeinsame Herausforderungen, unterschiedliche Positionen*. Berlin: Friedrich-Ebert-Stiftung, 2010.
- Dimitrov, Radoslav S. "Inside UN Climate Change Negotiations: The Copenhagen Conference". *Review of Policy Research*, Vol. 27, no. 6 (2010): 795-821.
- Econ Pöyry. *China, India, South Africa, Brazil (BASIC): Crucial for the Global Environment*. Commissioned by the Norwegian Ministry of the Environment. Oslo and Stavanger: Pöyry Management Consulting (Norway) SA, 2011.
- Favero, Alice and Chiara Rogate. *Winter-break in Cancún: will the EU carry its leadership?* Policy Brief. Milan: Fondazione Eni Enrico Mattei, 2010.
- Grossman, Gene M., and Alan B. Krueger. *Environmental Impacts of a North American Free Trade Agreement*. CEPR Discussion Paper 644. London: Centre for Economic Policy Research, 1992.
- Hallding, Karl, Marie Olsson, Aaron Atteridge, Antto Vihma, Marcus Carson and Mikael Román. *Together Alone: BASIC countries and the climate change conundrum*. Copenhagen: Nordic Council of Ministers, 2011.
- IPCC. *Fourth Assessment Report (AR4)*. 2007. Available from: <http://www.ipcc.ch/>. Accessed on: 27.02.2012.
- Khor, Martin. "Challenges of the Green Economy Concept and Policies in the Context of Sustainable Development, Poverty and Equity". In *The Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective*. Prepared under the direction of UN-DESA, UNEP and UNCTAD, 69-97. 2010. Available from: <http://www.unctad.org/biotrade/DocsGE/GreenEcoFullReport.pdf>. Accessed on: 27.02.2012.

- League of Arab States/UN. *Arab Region State of Implementation on Climate Change*. 2005. Available from: [http://www.un.org/esa/sustdev/csd/csd14/escwaRIM\\_bp2.pdf](http://www.un.org/esa/sustdev/csd/csd14/escwaRIM_bp2.pdf). Accessed on: 27.02.2012.
- Meléndez-Ortiz, Ricardo. “Governance of International Trade for the Green Economy”, Review of Policy Research. Volume 28, Issue 5, pages 479-486, September 2011.
- Ocampo, José A. “The Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective: Summary of Background Papers”. In *The Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective*. Prepared under the direction of UN-DESA, UNEP and UNCTAD, 3-15. 2010. Available from: <http://www.unctad.org/biotrade/DocsGE/GreenEcoFullReport.pdf>. Accessed on: 27.02.2012.
- Seligsohn, Deborah, Lutz Weischer, Shane Tomlinson and Pelin Zorlu. *Key Functions for a UNFCCC Technology Institutional Structure: Identifying Convergence in Country Submissions*. Working Paper. Washington DC: World Resources Institute, 2009.
- Stern, Nicholas. *The Economics of Climate Change: The Stern Review*. Cambridge University Press, 2007.
- United Nations. *Report of the Secretary-General’s High-Level Advisory Group on Climate Change Financing*. New York and Geneva: United Nations, 2010.
- \_\_\_\_\_. *AGENDA 21*. 1992. Available from: <http://www.un.org/esa/sustdev/documents/agenda21/english/Agenda21.pdf>. Accessed on: 27.02.2012.
- UNCSO, UNCTAD. *Trade and the Green Economy*. Rio+20 Issue Brief No.1. March 2011. Available from: <http://www.unctad.org/rio20/rio20issuesbriefs.html>. Accessed on: 27.02.2012.
- UNCTAD. *The Road to Rio+20 For a Development-led Green Economy*. UNCTAD/DITC/TED/2010/8. New York and Geneva: United Nations, 2011.
- \_\_\_\_\_. *The Green Economy: Trade and Sustainable Development Implications*. UNCTAD/DITC/TED/2010/2. New York and Geneva: United Nations, 2010.
- UNCTAD. *Review of Maritime Transport 2007*. New York and Geneva: United Nations, 2007.
- UNEP. *Green Economy: Developing Countries’ Success Stories*. Geneva: UNEP, 2010.
- \_\_\_\_\_. *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. 2011. Available from: [www.unep.org/greeneconomy](http://www.unep.org/greeneconomy). Accessed on: 27.02.2012.
- Vihma, Antto. *Elephant in the Room: The New G77 and China Dynamics in Climate Talks*. Briefing Paper 6. Helsinki: The Finnish Institute of International Affairs, 2010.
- World Resources Institute. *Summary of UNFCCC Submissions*. Working Paper. Washington DC: World Resources Institute, 2010.
- WTO and UNEP. *Trade and Climate Change: A report by the United Nations Environment Programme and the World Trade Organization*. Geneva: WTO and UNEP, 2009.
- Zondi, Siphamandla Dr, Dr Alastair Fraser, Professor Donna Lee, Dr Jean-Christophe Hoste, The Rt. Hon. Hilary Benn MP. *Emerging Agents of Change? Africa and International Negotiations*. London: Chatham House, 2011.

### ICTSD Publications

ICTSD. *Fostering Low Carbon Growth: The Case for a Sustainable Energy Trade Agreement*. Issue Paper. Geneva: International Centre for Trade and Sustainable Development, 2011

\_\_\_\_. *The Climate Technology Mechanism: Issues and Challenges*. Information Note No. 18. Geneva: International Centre for Trade and Sustainable Development, 2011.

\_\_\_\_. *The Trade and Climate Change Linkages*. ICTSD Brief for UNFCCC negotiators. Geneva: International Centre for Trade and Sustainable Development, 2011.

Monkelbaan, Joachim. *Transport, Trade and Climate Change: Carbon Footprints, Fuel Subsidies and Market-based Measures*. Working Paper. For the German NGO Forum on Environment and Development. Geneva: International Centre for Trade and Sustainable Development, 2011.

### ICTSD Reporting

Abdel Latif, A. "Technology Transfer and Intellectual Property: A Post-Copenhagen Assessment". *Bridges Review*, Vol. 14, no. 1 (February 2010). Available from: <http://ictsd.org/i/news/bridges/69167/>. Accessed on: 27.02.2012.

### Other News Articles and Web Sources

AOSIS Durban Release. "AOSIS Rejects Delay Until 2020: Demands Urgency for climate agreement". 28 November 2011. Available from: [http://aosis.info/documents/AOSIS\\_Durban\\_Release\\_Final%5B1%5D.pdf](http://aosis.info/documents/AOSIS_Durban_Release_Final%5B1%5D.pdf). Accessed on: 27.02.2012.

BASIC. *Joint Statement Issued at the Ninth BASIC Ministerial Meeting on Climate Change*. 1 November 2011. Available from: [http://moef.nic.in/downloads/public-information/Joint%20Statement\\_9th%20BASIC.pdf](http://moef.nic.in/downloads/public-information/Joint%20Statement_9th%20BASIC.pdf). Accessed on: 27.02.2012.

BASIC. *Joint Statement issued at the conclusion of the Eighth BASIC Ministerial Meeting on Climate Change*. 27 August 2011. Available from: <http://moef.nic.in/downloads/public-information/BASIC%20Joint%20Statement%20Inhotim%20final%20version.pdf>. Accessed on: 27.02.2012.

BASIC. *Joint Statement Issued at the Conclusion of the Seventh BASIC Ministerial Meeting on Climate Change*. 29 May 2011. Available from: <http://moef.nic.in/downloads/public-information/Joint%20statement%20BASIC%2029th%20May.pdf>. Accessed on: 27.02.2012.

BASIC. *Joint Statement Issued at the Conclusion of the Sixth BASIC Ministerial Meeting on Climate Change*. 27 February 2011. Available from: <http://moef.nic.in/downloads/public-information/BASIC-Stat-6.pdf>. Accessed on: 27.02.2012.

CAIT at the World Resources Institute. Available from: <http://cait.wri.org/>. Accessed on: 12.01.2012.

India. "Trade and the Environment: Use of Protectionist Unilateral Trade Measures (UTMs)". *Presentation by India*. Available from: [http://unfccc.int/files/cooperation\\_support/response\\_measures/application/pdf/india.pdf](http://unfccc.int/files/cooperation_support/response_measures/application/pdf/india.pdf). Accessed on: 12.01.2012.

Khor, Martin and Hira Jhamtani. "G77/China criticize developed countries' trade measures as being against Convention". *Third World Network: TWN Bonn News Update*. 14 August 2009. Update No. 9. Available from: <http://www.twinside.org.sg/title2/climate/bonn.news.4.htm>. Accessed on: 27.02.2012.

OPEC. "OPEC Presentation". *Joint SB forum on the impact of the implementation of response measures*. 13 June 2011. Available from: [http://unfccc.int/files/cooperation\\_support/](http://unfccc.int/files/cooperation_support/)

[response\\_measures/application/pdf/opec.pdf](#). Accessed on: 15.01.2012.

South Centre. "India, G77 Propose Text Against Trade Protection in Copenhagen Draft". South Bulletin, Issue 40. 10 September 2009. Available from: <http://www.southcentre.org/ARCHIVES/>. Accessed on: 27.02.2012.

UN, General Assembly. *Objectives and Themes of the United Nations Conference on Sustainable Development: Report of the Secretary-General*. A/CONF.216/7, 20 December 2010. Available from: <http://www.uncsd2012.org/rio20/index.html>. Accessed on: 27.02.2012.

UNEP. *Rio Declaration on Environment and Development*. 1992. Available from: <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163>. Accessed on: 27.02.2012.

WTO. *An Introduction to Trade and Environment in the WTO*. Available from: [http://www.wto.org/english/tratop\\_e/envir\\_e/envt\\_intro\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/envt_intro_e.htm). Accessed on: 27.02.2012.

### UNCSD Documents

African States, UNCSA. *Africa Consensus Statement to Rio+20*. 1 November 2011. Available from: <http://www.uncsd2012.org/rio20/compdocument.html>. Accessed on: 27.02.2012.

Argentina, UNCSA. *Inputs for the compilation document to serve as a basis for the preparation of the outcome document of the Conference on Sustainable Development*. 31 October 2011. Available from: <http://www.uncsd2012.org/rio20/compdocument.html>. Accessed on: 27.02.2012.

Bolivia, UNCSA. *Proposal of the Plurinational State of Bolivia for the United Nations Conference on Sustainable Development (Rio+20)*. 1. November 2011. Available from: <http://www.uncsd2012.org/rio20/compdocument.html>. Accessed on: 27.02.2012.

Brazil, UNCSA. *Submissions by Brazil to the Preparatory Process Rio+20 Conference*. 1 November 2011. Available from: <http://www.uncsd2012.org/rio20/compdocument.html>. Accessed on: 27.02.2012.

China, UNCSA. *National Submission of the People's Republic of China on the UN Conference on Sustainable Development in 2012*. 28 October 2011. Available from: <http://www.uncsd2012.org/rio20/compdocument.html>. Accessed on: 27.02.2012.

Group of 77 and China, UNCSA. *Submission by the Group of 77 and China for the compilation document of the United Nations Conference on Sustainable Development (Rio+20)*. 1 November 2011. Available from: <http://www.uncsd2012.org/rio20/compdocument.html>. Accessed on: 27.02.2012.

League of Arab States, UNCSA. *Outcome of the Arab Regional Preparatory Meeting for the United Nations Conference on Sustainable Development*. 1 November 2011. Available from: <http://www.uncsd2012.org/rio20/compdocument.html>. Accessed on: 27.02.2012.

Ministry of Environment and Forests, Government of India, UNCSA. *Inputs for the Secretary-General's Report to the Second Preparatory Committee of UNCSA*. 3 November 2010. Available from: [http://www.uncsd2012.org/files/response-member-states/Questionnaire-Email-submission-India\(Attachment\).pdf](http://www.uncsd2012.org/files/response-member-states/Questionnaire-Email-submission-India(Attachment).pdf). Accessed on: 27.02.2012.

UNCSA. *The Future We Want*. Zero draft of the Rio+20 outcome document. New York: United Nations Conference on Sustainable Development, 2012.



Venezuela, UNCSO. *Contributions of the Bolivarian Republic of Venezuela to the Draft Final Document of the United Nations Conference on Sustainable Development*. 1 November 2011. Available from: <http://www.uncsd2012.org/rio20/compdocument.html>. Accessed on: 27.02.2012.

#### UNFCCC Documents

UNFCCC. *Joint Submissions by African Group, Argentina, Brazil, China, India, Iran, Lebanon, Malaysia, Philippines, Thailand and Uruguay on SHARED VISION*. 2011. Available from: <http://unfccc.int/2860.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Submission by the Bolivarian Republic of Venezuela for a decision of the COP on item 3.2.6 on Economic and Social Consequences of Response Measures*. 2011. Available from: <http://unfccc.int/2860.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Outcome of the work of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention*. Draft decision [-/CP.17]. December 2011. Available from: <http://unfccc.int/2860.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Update of the amalgamation of draft texts in preparation of a comprehensive and balanced outcome to be presented to the Conference of the Parties for adoption at its seventeenth session*. FCCC/AWGLCA/2011/CRP.38. 7 December 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Written input by Saudi Arabia on behalf of India, China, Iran, Venezuela, Argentina and the Arab Group under LCA agenda item 3.2.6*. 7 December 2011. Available from: <http://unfccc.int/2860.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Submission by Singapore on the economic and social consequences of response measures*. FCCC/AWGLCA/2011/CRP.30. 6 October 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Submission by the Plurinational State of Bolivia*. FCCC/AWGLCA/2011/CRP.23. 4 October 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Submission by India, Brazil, China, South Africa, Argentina, Venezuela, Bolivia (Plurinational State of), Uruguay, Egypt, Thailand, Saudi Arabia, Ecuador, Nicaragua and Philippines on the general framework for cooperative sectoral approaches and sector specific actions in order to enhance the implementation of Article 4, paragraph 1(c), of the Convention*. FCCC/AWGLCA/2011/CRP.22. 4 October 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Further views on the elements for the development of a work programme and a possible forum on response measures*. FCCC/SB/2011/MISC.4/Add.1. 4 October 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Submission from India on behalf of Argentina, China, African Group, Organization of Petroleum Exporting Countries (OPEC), Arab Group, Thailand, Malaysia, Uruguay and Philippines on economic and social consequences of response measures*. FCCC/AWGLCA/2011/CRP.14. 1 October 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.

- \_\_\_\_. *Proposals by India for inclusion of additional agenda items in the provisional agenda of the seventeenth session of the Conference of the Parties*. FCCC/CP/2011/INF.2. 21 September 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Submission from Argentina on behalf of the Group of 77 and China*. FCCC/AWGLCA/2011/CRP.6. 17 June 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Submission from India on behalf of the African Group, Argentina, Brazil, China, India, Iran (Islamic Republic of), Lebanon, Malaysia, Philippines, Thailand and Uruguay*. FCCC/AWGLCA/2011/CRP.5. 17 June 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Views on the modalities for the operationalisation of the work programme and on a possible forum on response measures*. FCCC/SB/2011/MISC.2. 6-16 June 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Submission of Grenada on behalf of the Alliance of Small Island States to the Ad-Hoc Working Group on long-term Cooperative Action under the Convention*. April 2011. Available from: <http://unfccc.int/2860.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Submission by Grenada on behalf of the Alliance of Small Island States to the Subsidiary Body on Implementation*. April 2011. Available from: <http://unfccc.int/2860.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Views on the elaboration of non-market-based mechanisms*. FCCC/AWGLCA/2011/MISC.3. 21 March 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Views on the elaboration of market-based mechanisms*. FCCC/AWGLCA/2011/MISC.2. 21 March 2011. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Preparation of an outcome to be presented to the Conference of the Parties for adoption at its sixteenth session to enable the full, effective and sustained implementation of the Convention through long-term cooperative action now, up to and beyond 2012*. FCCC/AWGLCA/2010/MISC.8/Add.2. 10 December 2010. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Ideas and proposals on the elements contained in paragraph 1 of the Bali Action Plan*. FCCC/AWGLCA/2008/MISC.5/Add.2. 10 December 2008. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Ideas and Proposals on the elements contained in paragraph 1 of the Bali Action Plan*. FCCC/WAGLCA/2008/MISC.5. 27 October 2008. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007*. FCCC/CP/2007/6/Add.1. 14 March 2008 Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.
- \_\_\_\_. *Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its first session, held at Montreal from 28 November to 10 December*

2005. FCCC/KP/CMP/2005/8/Add.4. 30 March 2006. Available from: <http://unfccc.int/documentation/documents/items/3595.php>. Accessed on: 27.02.2012.

\_\_\_\_. *Kyoto Protocol to the United Nations Convention on Climate Change*. 1998 Available from: <http://unfccc.int/resource/docs/convkp/kpeng.pdf>. Accessed on: 27.02.2012.

\_\_\_\_. *United Nations Framework Convention on Climate Change*. 1992. Available from: <http://unfccc.int/resource/docs/convkp/conveng.pdf>. Accessed on: 27.02.2012.

#### WTO Documents

WTO. *China - Measures Related to the Exportation of Various Raw Materials*. WT/DS394/395/398/AB/R. 30 January 2012. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.

\_\_\_\_. *Preferential Treatment to Services and Services Suppliers of Least-developed Countries*. WT/L/847. 19 December 2011. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.

\_\_\_\_. *Report (2011) of the Committee on Trade and Environment*. WT/CTE/18. 21 November 2011. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.

\_\_\_\_. *Report of the Meeting held on 6 July 2011*. WT/CTE/M/52. 6 September 2011. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.

\_\_\_\_. *China - Measures Related to the Exportation of Various Raw Materials*. WT/DS394/395/398/R. 5 July 2011. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.

\_\_\_\_. *Matrix on Trade-Related Measures Pursuant to Selected Multilateral Environmental Agreements*. WT/CTE/W/160/Rev.5, TN/TE/S/5/Rev.3. 15 June 2011. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.

\_\_\_\_. *Textual Elements Derived from Members' Submissions under Paragraph 31 (iii)*. JOB/TE/20. 21 April 2011.

\_\_\_\_. *Committee on Trade and Environment in Special Session. Report by the Chairman, Ambassador Manuel A.J. Teehanke to the Trade Negotiations Committee*. TN/TE/20. 21 April 2011. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.

\_\_\_\_. *Documents from the negotiating chairs*. 21 April 2011. Available from: [http://www.wto.org/english/tratop\\_e/dda\\_e/chair\\_texts11\\_e/chair\\_texts11\\_e.htm](http://www.wto.org/english/tratop_e/dda_e/chair_texts11_e/chair_texts11_e.htm). Accessed on: 27.02.2012.

\_\_\_\_. *WTO Negotiations on Environmental Goods and Services: Addressing the Development Dimension for a "Triple-Win" Outcome. Communication from China and India*. TN/TE/W/79. 15 April 2011. Available from: [http://www.wto.org/english/tratop\\_e/dda\\_e/chair\\_texts11\\_e/chair\\_texts11\\_e.htm](http://www.wto.org/english/tratop_e/dda_e/chair_texts11_e/chair_texts11_e.htm). Accessed on: 27.02.2012.

\_\_\_\_. *Promoting Mutual Supportiveness between Trade and Climate Change Mitigation Actions: Carbon-Related Border Tax Adjustments. Communication from Singapore*. WT/CTE/W/248. 30 March 2011. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.

- \_\_\_\_. *Combined Approach for Environmental Goods. Submission by Mexico and Chile.* JOB/TE/16/Corr.1. 21 March 2011.
- \_\_\_\_. *Combined Approach for Environmental Goods. Submission by Mexico and Chile.* JOB/TE/16. 11 March 2011.
- \_\_\_\_. *A Hybrid Approach to the Liberalization of Environmental Goods under Paragraph 31 (iii). Submission by Australia, Colombia, Hong Kong, China, Norway and Singapore.* JOB/TE/15. 7 March 2011.
- \_\_\_\_. *Submission by the ACP Group.* JOB/TE/14. 7 March 2011.
- \_\_\_\_. *Report (2010) of the Committee on Trade and Environment.* WT/CTE/17. 30 November 2010. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Summary Report of the Information Session on Product Carbon Footprint and Labelling Schemes 17 February 2010.* WT/CTE/M/49/Add.1. 28 May 2010. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Report of the Meeting held on 17 February 2010.* WT/CTE/M/49. 7 April 2010. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Committee on Trade and Environment in Special Session. Report by the Chairman, Ambassador Manuel A.J. Teehankee, to the Trade Negotiations Committee for the purpose of the TNC stocktaking exercise.* TN/TE/19. 22 March 2010. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *The Doha Round and Climate Change. Submission by Argentina.* TN/TE/W/74. 23 November 2009. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Report (2009) of the Committee on Trade and Environment.* WT/CTE/16. 30 October 2009. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Report of the Meeting held on 10 July 2009.* WT/CTE/M/47. 31 August 2009. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Committee on Trade and Environment in Special Session. Report by the Chairman, Ambassador Manuel A.J. Teehankee to the Trade Negotiations Committee.* TN/TE/18. 18 July 2008. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Proposal for the Establishment of a Group of Experts on Trade and Environment. Submission by the African Group.* JOB (08)/38. 8 May 2008.
- \_\_\_\_. *Report (2007) of the Committee on Trade and Environment.* WT/CTE/14. 4 December 2007. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Environmental Goods for Development. Submission by Brazil.* JOB (07)/146. 1 October 2007.
- \_\_\_\_. *Report of the Meeting held on 2 May 2007.* WT/CTE/M/44. 13 June 2007. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.

- \_\_\_\_. *Proposal for an Outcome on Trade and Environment Concerning Paragraph 31(l) of the Doha Ministerial Declaration. Submission from Australia and Argentina.* TN/TE/W/72/Rev.1. 7 May 2007. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Integrated Proposal on Environmental Goods for Development. Submission by Argentina.* TN/TE/W/62. 14 October 2005. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Structural Dimensions of the Environmental Project Approach. Submission by India.* TN/TE/W/54. 4 July 2005. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Doha Ministerial Declaration.* WT/MIN(01)/DEC/1. 20 November 2001. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *United States - Import Prohibition of Certain Shrimp and Shrimp Products.* WT/DS58/AB/R. 12 October 1998. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *United States - Standards for Reformulated and Conventional Gasoline.* WT/DS2/9. 20 May 1996. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *United States - Standards for Reformulated and Conventional Gasoline.* WT/DS2/AB/R. 29 April 1996. Available from: [http://docsonline.wto.org/gen\\_home.asp?language=1&\\_=1](http://docsonline.wto.org/gen_home.asp?language=1&_=1). Accessed on: 27.02.2012.
- \_\_\_\_. *Marrakesh Agreement Establishing the World Trade Organization.* 1994. Available from: [http://www.wto.org/english/docs\\_e/legal\\_e/legal\\_e.htm](http://www.wto.org/english/docs_e/legal_e/legal_e.htm). Accessed on: 27.02.2012.
- \_\_\_\_. *Decision on Trade and Environment.* Adopted by ministers at the meeting of the Uruguay Round Trade Negotiations Committee in Marrakesh, 14 April 1994. 1994. Available from: [http://www.wto.org/english/tratop\\_e/envir\\_e/issu3\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/issu3_e.htm). Accessed on: 27.02.2012.

## ANNEX I. UNITED NATIONS CONFERENCE ON THE HUMAN ENVIRONMENT (STOCKHOLM, 1972) ACTION PLAN FOR THE HUMAN ENVIRONMENT RECOMMENDATIONS ADDRESSING TRADE ISSUES (103, 104 AND 105)

### Recommendation 103

It is recommended that Governments take the necessary steps to ensure:

- (a) That all States participating in the Conference agree not to invoke environmental concerns as a pretext for discriminatory trade policies or for reduced access to markets and recognize further that the burdens of the environmental policies of the industrialized countries should not be transferred, either directly or indirectly, to the developing countries. As a general rule, no country should solve or disregard its environmental problems at the expense of other countries;
- (b) That where environmental concerns lead to restrictions on trade, or to stricter environmental standards with negative effects on exports, particularly from developing countries, appropriate measures for compensation should be worked out within the framework of existing contractual and institutional arrangements and any new such arrangements that can be worked out in the future;
- (c) That the General Agreement of Tariffs and Trade, among other international organizations, could be used for the examination of the problems, specifically through the recently established Group on Environmental Measures and International Trade and through its general procedures for bilateral and multilateral adjustment of differences;
- (d) That whenever possible (that is, in cases which do not require immediate discontinuation of imports), countries should inform their trading partners in advance about the intended action in order that there might be an opportunity to consult within the GATT Group on Environment Measures and International Trade, among other international organizations. Assistance in meeting the consequences of stricter environmental standards ought to be given in the form of financial or technical assistance for research with a view to removing the obstacles that the products of developing countries have encountered;
- (e) That all countries agree that uniform environmental standards should not be expected to be applied universally by all countries with respect to given industrial processes or products except in those cases where environmental disruption may constitute a concern to other countries. In addition, in order to avoid an impairment of the access of the developing countries to the markets of the industrialized countries because of differential product standards, Governments should aim at worldwide harmonization of such standards. Environmental standards should be established, at whatever levels are necessary, to safeguard the environment, and should not be directed towards gaining trade advantages;
- (f) That the Governments and the competent international organizations keep a close watch on medium and long-term trends in international trade and take measures with a view to promoting:
  - (i) The exchange of environmental protection technologies;
  - (ii) International trade in natural products and commodities, which compete with synthetic products that have a greater capacity for pollution.

**Recommendation 104**

It is recommended that the Secretary-General ensure:

- (a) That appropriate steps shall be taken by the existing United Nations organizations to identify the major threats to exports, particularly those of developing countries that arise from environmental concerns, their character and severity, and the remedial action that may be envisaged;
- (b) That the United Nations system, in cooperation with other governmental and non-governmental agencies working in this field, should assist Governments to develop mutually acceptable common international environmental standards on products which

are considered by Governments to be of significance in foreign trade. Testing and certification procedures designed to ensure that the products conform to these standards should be such as to avoid arbitrary and discriminatory actions that might affect the trade of developing countries.

**Recommendation 105**

It is recommended that the General Agreement of Tariffs and Trade, the United Nations Conference on Trade and Development and other international bodies as appropriate, should, within their respective fields of competence, consider undertaking to monitor, assess, and regularly report the emergence of tariff and non tariff barriers to trade as a result of environmental policies.

## ANNEX II. ACTIVITIES IN AGENDA21 RELATED TO ENVIRONMENT/ TRADE AND DEVELOPMENT AGENDA

- (a) Elaborate adequate studies for the better understanding of the relationship between trade and environment for the promotion of sustainable development;
- (b) Promote a dialogue between trade, development and environment communities;
- (c) In those cases when trade measures related to environment are used, ensure transparency and compatibility with international obligations;
- (d) Deal with the root causes of environment and development problems in a manner that avoids the adoption of environmental measures resulting in unjustified restrictions on trade;
- (e) Seek to avoid the use of trade restrictions or distortions as a means to offset differences in cost arising from differences in environmental standards and regulations, since their application could lead to trade distortions and increase protectionist tendencies;
- (f) Ensure that environment-related regulations or standards, including those related to health and safety standards, do not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade;
- (g) Ensure that special factors affecting environment and trade policies in the developing countries are borne in mind in the application of environmental standards, as well as in the use of any trade measures. It is worth noting that standards that are valid in the most advanced countries may be inappropriate and of unwarranted social cost for the developing countries;
- (h) Encourage participation of developing countries in multilateral agreements through such mechanisms as special transitional rules;
- (i) Avoid unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country. Environmental measures addressing transborder or global environmental problems should, as far as possible, be based on an international consensus. Domestic measures targeted to achieve certain environmental objectives may need trade measures to render them effective. Should trade policy measures be found necessary for the enforcement of environmental policies, certain principles and rules should apply. These could include, *inter alia*, the principle of non-discrimination; the principle that the trade measure chosen should be the least trade-restrictive necessary to achieve the objectives; an obligation to ensure transparency in the use of trade measures related to the environment and to provide adequate notification of national regulations; and the need to give consideration to the special conditions and developmental requirements of developing countries as they move towards internationally agreed environmental objectives;
- (j) Develop more precision, where necessary, and clarify the relationship between GATT provisions and some of the multilateral measures adopted in the environment area;
- (k) Ensure public input in the formation, negotiation and implementation of trade policies as a means of fostering increased transparency in the light of country-specific conditions;
- (l) Ensure that environmental policies provide the appropriate legal and institutional framework to respond to new needs for the protection of the environment that may result from changes in production and trade specialization.



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The Global Platform on Climate Change, Trade and Sustainable Energy of the International Centre for Trade and Sustainable Development (ICTSD) mobilizes technical and political expertise to address the nexus between trade, climate change and energy, in order to foster strong multilateral regimes that promote the transition to a low-carbon economy and a sustainable energy future.

Through research and analysis, as well as policy dialogues, the Global Platform advances the analytical capacity of stakeholders, supports their interaction with policy makers, and builds effective cross-disciplinary understanding so that solutions can be built and agreed by the international community.

Activities undertaken under the Global Platform are clustered in seven key areas:

- connecting trade- and climate change policies;
- innovation and technology transfer to address climate change;
- trade policy conducive to climate action;
- adapting to climate change;
- carbon leakage and competitiveness;
- addressing international transport emissions.

For further information, visit <http://ictsd.org/programmes/climate-change/>

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Founded in 1996, the International Centre for Trade and Sustainable Development (ICTSD) is an independent think-and-do-tank based in Geneva, Switzerland and with operations throughout the world. Out-posted staff in Brazil, Mexico, Costa Rica, Senegal, Canada, Russia, and China. By enabling stakeholders in trade policy through information, networking, dialogue, well-targeted research and capacity-building, ICTSD aims to influence the international trade system so that it advances the goal of sustainable development. ICTSD co-implements all of its programme through partners and a global network of hundreds of scholars, researchers, NGOs, policy-makers and think-tanks around the world.