world trade institute

MILE 11 Thesis | September 2011

Subsidies and Climate Change: Some Legal Aspects of Trade Policy Response

Andrii Gryshko

Supervisor: Gary N. Horlick

UNIVERSITÄT BERN

Table of Contents

List of Abbreviations and Acronyms

AoA	Agreement on Agriculture
AHW-KP	Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol
AHG-LCA	Ad Hoc Working Group on Long-Term Cooperative Action under the Convention
ASCM	Agreement on Subsidies and Countervailing Measures
COP	Conference of the Parties to the United Nations Framework Convention on Climate Change
CVD	Countervailing Duty
DSU	Understanding on Rules and Procedures Governing the Settlement of Disputes
EIT	Economies in Transition
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GHG	Greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
LDC	Least Developed Country
MEA	Multilateral Environmental Agreement
OECD	Organization of Economic Co-operation and Development
SWCC	The Second World Climate Conference
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Program

UNEP	United Nations Environmental Program
UNFCCC	United Nations Framework Convention on Climate Change
WB	The World Bank
WMO	World Meteorological Organization
WTO	World Trade Organization

"*Progress is impossible without change, and those who cannot change their minds cannot change anything".*

George Bernard Shaw.

Introduction

The consequences of global warming[1] seem to be increasingly visible around the world. Many scientists argue that global warming is caused by the anthropogenic activity that adversely affects the turnover of carbon dioxide in the global climate system[2] (so-called 'carbon circle'). A growing world population as well as the production and consumption of carbon-intensive goods and services have resulted in increasing levels of concentration of six major greenhouse gases (GHG)[3] in the atmosphere, for which emissions of carbon dioxide accounted for 72.9 percent of total GHG emissions in 2005[4]. According to scientific research, excessive amounts of GHGs in the atmosphere trap the heat reflected from the Earth's surface, causing the warming effect and the ensuing climate change which adversely impact the environment and all human, animal and plant life.[5]

The climate change challenge can only be addressed by international cooperation and shared concerns and objectives regarding implementation of climate change mitigation measures. A new, global deal on climate change implies the conclusion of a legally binding and enforceable agreement on a set of measures which ensure emission reduction over an agreed timeframe, resulting in the stabilization of GHG concentration in the atmosphere at acceptable level.[6] Unfortunately, both developed and developing countries seem reluctant to take immediate and strong action aimed at reducing emissions, despite the threat of severe consequences for economic and social development worldwide. The future risks and uncertainties are significant. Estimation of costs and benefits cannot be precisely predicted but it is evident that present and future generations will pay a high price for avoiding or minimizing climate change consequences. The possible benefits

---

[1] For example increase in average global temperature and sea level, rising intensity and frequency of extreme weather events, devastation of ecosystems and others.

[2] According to the definition given in Article 1 of the UNFCCC "climate system" means the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions.

[3] Carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluocrocarbons (PFCs), and sulfur hexafluoride (SF6).

[4] *Source:* World Resources Institute, Climate Analysis Indicators Tool (CAIT) Version 85.0, December 1, 2010.

[5] Hepburn, C., Stern, N., A New Global Deal on Climate Change, Oxford Review of Economic Policy, Volume 24, Number 2, 2008, pp. 259–260)

[6] Ibid, p. 277.

might be perceivable only sometime in the distant future[7] but the price of inactivity will be much higher.

The transformation of our current emissions-intensive method of production and consumption into environmentally and climate-friendly production is a challenging exercise. It may be achieved only by a fundamental, revolutionary change of the human world-view, lifestyle and a growth path heavily dependent upon fossil fuels.[8] Consequently, the international community must take immediate action to mitigate climate change by reducing global GHG emissions to an acceptable level which does not negatively affect the natural carbon circle. Countries should set emissions reduction targets and implement measures that ensure their achievement. Especially deep reductions are required from the biggest GHG emitters – a relatively small group of industrialized countries and a few emerging economies.

Industrialized countries push for national GHG emissions limits set on the 'carbon price equivalency' approach[9], while developing countries advocate a 'per capita comparability' approach.[10] The major concern of developed countries is the loss of competitiveness of domestic producers as a result of high adjustment costs and consequent leakage of production and jobs abroad,[11] whereas developing countries disagree with limiting their economic growth by sharing responsibility for excessive GHG stocks with developed countries who were major emitters during the long period of industrialization. However, in order to be effective, the global deal on climate change must imply a well-balanced approach – substantial reduction and/or limitation of emissions by all major emitters guided by the principle of common but differentiated responsibility.

Climate change response will inevitably impact trade and its pattern and countries will take recourse to trade measures, implementing domestic climate change mitigation policies. There are concerns that climate change will be used as a justification for the wave of so-called 'green' protectionism that affect developing

[7] Bolin, B., *A History of the Science and Politics of Climate Change. The Role of the Intergovernmental Panel on Climate Change*, Cambridge: Cambridge University Press, 2007, p. 98.

[8] Fuels, which contain high percentage of carbon, include coal, oil and natural gas.

[9] 'Per capita comparability' approach implies that national emissions reduction targets must reflect levels of cumulative emissions over a historic period of industrial development of each country.

[10] 'Carbon price equivalency' approach implies that new emissions equally contribute to global warming regardless their country of origin.

[11] Hufbauer, G.C., Charnovitz, S., Kim, J., *Global Warming and the World Trading System*, Peterson Institute for International Economics, March 2009, p. 12.

countries. Therefore, interaction between the global climate change regime and the multilateral trading system becomes crucial for sustainable development.

This paper attempts to assess the possible outcomes of climate change negotiations and their interaction with WTO law on subsidization and subsidized trade. Multilateral rules on subsidization and subsidized trade should optimally support rather than impair effective implementation of climate measures that reduce emissions. This position will be explored by analyzing the way in which governments may use a number of measures related to trade and industrial policies in order to bring about emissions reductions. Governmental assistance is an important instrument that may either enhance further GHG emissions, through subsidization of fossil-fuels and other emissions-intensive goods and services, or promote reduction through subsidization of energy efficiency programs, sustainable forms of agricultural production, renewable energy production and consumption, research, development and commercial deployment of new climate-friendly technologies. It will be argued that prompt conclusion of the new, comprehensive climate change agreement could achieve the desired coherence, synergy and mutual supportiveness of climate change and trade regimes. WTO law contains legal instruments which may contribute to these objectives and remove potential uncertainty and unpredictability for the benefit of sustainable development whether through negotiation or litigation.

1. International legal and institutional frameworks on climate change

International legal and institutional frameworks on climate change began its evolution in the early 1970s, when the Stockholm Declaration on the Human Environment[12] was adopted at the UN Conference that was held 1972 in Stockholm (hereinafter the Stockholm Conference). Ten years later, in 1992, the international legal and institutional frameworks were established to address the climate change challenge.

The UN Framework Convention on Climate Change[13] (UNFCCC) and its Kyoto Protocol[14] constitute an international legal framework on climate change. The UNFCCC is an umbrella treaty. It covers issues related to climate change and its relationship to sustainable development. It sets out general principles and rules that

[12] U.N. Doc. A/CONF.48/14/Rev.1 (1972), *reprinted in* 11 I.L.M. 1417 (1972).

[13] United Nations Framework Convention on Climate Change, May 9, 1992, S. TREATY DOC. NO. 102-38 (1992), 1771 UNTS 107

[14] Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 11, 1997, 2303 UNTS 162.

"require its signatories to take climate considerations into account in the development of their social, economic and environmental policies and actions."[15]

The international institutional framework consists of the Conference of the Parties (COP), Subsidiary Bodies for Scientific and Technological Advice (SBSTA) and for Implementation (SBI), Conventional Bodies (Consultative Group of Experts, Least Developed Country (LDC) Expert Group, the Adaptation Committee, the Technology Executive Committee and the Climate Technology Centre and Network), the Green Climate Fund, the Global Environment Facility (GEF),[16] the Intergovernmental Panel on Climate Change (IPCC) and the Secretariat of the UNFCCC.

1.1. Evolution of the international framework addressing the climate change challenge: from Stockholm to Rio de Janeiro

Issues related to protection and preservation of the environment remained outside the international agenda until the early 1970s. In 1968 the UN supported the initiative of the Swedish government which in 1972 organized a conference on the human environment in Stockholm. This conference paved the way for international cooperation in the environmental field. Outcomes of the Stockholm Conference were the adoption of the Stockholm Declaration and the establishment of the United Nations Environmental Program (UNEP).

Soon after, a number of international environmental treaties were negotiated and concluded. Most of them focused on so-called 'first generation' environmental problems related to water, air and soil pollution arising from activities associated with industry, poverty and under-development.[17]

From the mid-1980s, 'second generation' environmental problems, including global warming and consequent climate change, captured the attention of policy-makers in many countries. The effective response to these challenges required countries to take into account environment protection concerns by implementing their

[15] Adede, Andronico O., "The Treaty System from Stockholm (1972) to Rio de Janeiro (1992)" (1995). *Pace Environmental Law Review.* Paper 267, Volume 13, Fall 1995, p. 40. http://digitalcommons.pace.edu/envlaw/267

[16] The joint establishment of the World Bank, UNEP and UNDP was entrusted by the COP to operate the UNFCCC financial mechanism and to manage the three funds established by the Marrakesh Accords – the special climate change fund, the LDC fund and the adaptation fund.

[17] Adede, Andronico O., "The Treaty System from Stockholm (1972) to Rio de Janeiro (1992)" (1995). *Pace Environmental Law Review.* Paper 267, Volume 13, Fall 1995, p. 34. http://digitalcommons.pace.edu/envlaw/267

national development programs. Sustainability became the major guiding principle for design and implementation of development strategies worldwide.

Sustainable development and its impact on the environment became the key issue of the UN Conference on Environment and Development (UNCED, also known as the "Earth Summit") held in Rio de Janeiro in June 1992. UNCED resulted in the adoption of the important international legal instruments – Agenda 21 (which set out a comprehensive program of global action in all areas of sustainable development), the Rio Declaration on Environment and Development (set out the guiding principles of sustainable development), the UNFCCC and the Convention on Biological Diversity (CBD).

The IPCC[18] played a crucial role in concluding the UNFCCC. Its First Assessment Report (FAR), conducted by a large group of well-known scientists from different countries, convinced skeptical governments to join global efforts and conclude an international agreement on climate change.[19]

1.2. Brief overview of the UN Framework Convention on Climate Change 1992 and Kyoto Protocol 1997: history, major provisions and parties

The UNFCCC 1992, followed by the Kyoto Protocol 1997 which implemented UNFCCC provisions, constitute the current international legal climate change framework.

The FAR prepared by the IPCC served as a scientific basis for negotiation of the UNFCCC[20]. It called for urgent international response to the climate change challenge. In December 1990 the UN General Assembly adopted a resolution[21] establishing the Intergovernmental Negotiating Committee on Climate Change (INCCC) and instructed it to initiate negotiations of a multilateral treaty on climate change to be concluded at UNCED.[22]

---

[18] The IPCC had been established jointly by the UNEP and WMO in 1988 with the explicit mandate to assess the probability of occurrence of the human-induced climate change on the basis of available scientific evidences.

[19] Bolin, B., *A History of the Science and Politics of Climate Change. The Role of the Intergovernmental Panel on Climate Change*, Cambridge: Cambridge University Press, 2007, p. 68-77.

[20] Ibid, p. 59.

[21] G.A. Res. 45/212, UN GAOR 2d Comm. 45th Sess. Supp. No 49A, at 147, UN Doc. A/45/49 (1991).

[22] Adede, Andronico O., "The Treaty System from Stockholm (1972) to Rio de Janeiro (1992)" (1995). *Pace Environmental Law Review.* Paper 267, Volume 13, Fall 1995, p. 40. http://digitalcommons.pace.edu/envlaw/267; and Bolin, B., *A History of the Science and Politics of Climate Change. The Role of the Intergovernmental Panel on Climate Change*, Cambridge: Cambridge University Press, 2007, p. 69.

After almost 15 months of intense negotiations the UNFCCC was signed by 156 states in June 1992 at the Rio Earth Summit and entered into force in March 1994. The UNFCCC has 194 Parties which makes the Convention a universal international legal instrument. Parties of the UNFCCC recognized, among others, that human activities contributed to substantial increasing of GHG concentrations in the atmosphere and caused global warming and consequent climate change which adversely affected natural ecosystems and humankind.[23]

Therefore, the ultimate objective of the UNFCCC and any related legal instrument that COP may adopt is to achieve the "stabilization of the GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system . . . within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."[24]

The UNFCCC established important guiding principles that urged Parties to take precautionary measures even when scientific uncertainty remains[25]; emphasized significance of sustainable economic growth and development of all Parties,[26] and required to avoid arbitrary or unjustifiable discrimination or a disguised restriction on international trade implementing climate change policy.[27]

Article 4 of the UNFCCC applied an asymmetrical approach to the Parties' commitments that reflected their common but differentiated responsibilities, respective capabilities and specific national and regional development priorities, objectives and circumstances. The UNFCCC implies stronger obligations of the developed country Parties and other Parties included in Annex I[28] to the Convention comparing to the developing country Parties[29].

Basically, the UNFCCC requires its country Parties to limit or reduce their GHG emissions at national and regional level and to protect and enhance their GHG

[23] Preamble to the UNFCCC

[24] The UNFCCC, Article 2.

[25] The UNFCCC, Article 3.3.

[26] The UNFCCC, Article 3:4.

[27] The UNFCCC, Article 3:5.

[28] I.e. OECD countries and economies in transition (EIT).

[29] Non-Annex I country Parties.

sinks and reservoirs[30]. Article 4 of the UNFCCC contains two types of commitments of the Parties: commitments to take measures related to addressing climate change[31] and commitments to ensure transparency, exchange of information and international cooperation among Parties[32]. Additionally, developed country Parties committed to providing financial resources and knowledge-sharing, including the transfer of environmentally sound technologies and know-how, in order to enable other Parties to implement the provisions of the Convention. The UNFCCC provides for the settlement of disputes between the Parties concerning the interpretation or application of the Convention[33]. However, no disputes between the Parties have arisen so far.

Article 7 of the UNFCCC established COP as the supreme body of this Convention. According to its mandate COP shall keep under regular review the implementation of the Convention and any related legal instruments that the Conference of the Parties may adopt, and shall make the decisions necessary to promote the effective implementation of the Convention.

The first session of the COP was held in March 1995 in Berlin. It concluded that voluntary commitments undertaken by the Annex I country Parties were insufficient to ensure the achievement of the Convention's objective and adopted "the

[30] 'Sink' and 'Reservoir' mean anything that removes GHG from the atmosphere or stores GHG respectively.

[31] All Parties are required to formulate, implement, publish and regularly update national and regional programs on climate change mitigation and adaptation (Article 4:1(b); to promote sustainable management, conservation and enhancement of GHGs sinks and reservoirs (Article 4:1(d); to take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions, and employ appropriate methods with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change (Article 4:1(f). Furthermore, Article 4:2(a) requires the developed country Parties and other Parties included in Annex I to adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic GHG emissions and protecting and enhancing its GHG sinks and reservoirs. The Annex I country Parties also agreed to take the lead in addressing climate change issue and agreed to return by the year 2000 their GHG emissions to the legally non-binding baseline set generally at 1990 levels.

[32] Most of the commitments in Article 4 ensure transparency and international cooperation. Parties committed to develop, periodically update, publish and make available to the Conference of the Parties national inventories of anthropogenic emissions by sources and removals by sinks of all GHGs (Article 4:1(a); to communicate to the COP information related to implementation (Article 4:1(j); to promote and cooperate in: development, application and diffusion of climate friendly technologies, practices and processes (Article 4:1(c); preparing for adaptation to the impacts of climate change (Article 4:1(e); conducting researches related to the climate system, climate change mitigation and adaptation (Article 4:1(g); exchange of relevant information related to the climate system and climate change (Article 4:1(h); education, training and public awareness related to climate change (Article 4:1(i).

[33] The UNFCCC, Article 14 provides for settlement of disputes through negotiation or other peaceful means of their own choice (e.g. submission of the dispute to the International Court of Justice, arbitration and conciliation).

Berlin Mandate"[34] that authorized the further strengthening of emissions reduction commitments of Annex I Parties by setting legally binding quantified limitation and reduction objectives within specified time-frames. Developing countries, i.e. non-Annex I country Parties, reaffirmed their obligations under the UNFCCC and were not required to undertake new commitments regarding emissions limitation or reduction.

After two and a half years of intense negotiations conducted under the Berlin Mandate – the first and, to date, only Protocol to the UNFCCC was adopted at the third session of the COP held in Kyoto in December 1997. As of September 2011, 191 states have signed and ratified the Kyoto Protocol[35], including all Annex I country Parties accept the US.[36] The Kyoto Protocol substantially developed the international climate change framework. This international legal instrument set out binding commitments of Annex I Parties to limit or reduce their GHG emissions on average by 5.2 percent below 1990 levels[37] during the first commitment period, i.e. 2008 – 2012.[38]

The Protocol outlined different ways in which Annex I Parties could fulfill their commitments. Article 2 outlined an indicative list of policies and measures, implementation of which might help mitigate climate change and promote sustainable development[39] (e.g. enhancement of energy efficiency, protection of GHG sinks and reservoirs, promotion of sustainable forms of agriculture, facilitation of development and use of the environmentally and climate friendly technologies, including renewable energy and carbon sequestration, progressive reduction and phasing out of market imperfections, including subsidies, that affect the objective of the UNFCCC, limitation and/or reduction of GHG emissions in the transport sector, etc.).

Apart from further elaboration of certain Parties' commitments under the UNFCCC[40], the Kyoto Protocol substantially developed the international climate

[34] The Berlin Mandate: Review of the Adequacy of Article 4, paragraph 2(a) and (b), of the Convention, Decision 1/CP.1, in COP Report No. 1, Addendum, at 4, UN Doc. FCCC/CP/1995/7/Add.1 (June 6, 1995).

[35] The UNFCCC website, http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php, visited 08 September 2011.

[36] On March 29, 2001, the G.W. Bush Administration withdrew the US from the Kyoto Protocol.

[37] Annex B to the Kyoto Protocol set out the exact amounts of quantified emission limitation and reduction commitments assigned to each Annex I country Party.

[38] Kyoto Protocol, Article 3.1.

[39] A Guide to Climate Change Convention and Its Kyoto Protocol, Climate Change Secretariat, Bonn, 2002, http://unfccc.int/resource/process/guideprocess-p.pdf

[40] I.e. sub-paragraphs (a), (b), (c), (g), (i) and (j) of Article 4.1, Article 4.3, Article 4.8, Article 5, Article 6, Article 11 and Article 12 of the UNFCCC.

change framework by introducing 'flexibility mechanisms'[41]. Kyoto mechanisms facilitate implementation of Annex I Parties emissions reduction commitments by lowering the costs of climate change mitigation. However, these mechanisms were recognized as a supplementary means that could be used by Parties to the Kyoto Protocol in order to help meet their principle commitments, i.e. to ensure emissions reduction according to defined targets. Essentially, Kyoto mechanisms enable Parties incurring high costs for GHG emissions reduction to benefit from emission cutting by Parties where such costs are comparatively lower. Taken together Kyoto mechanisms enhanced establishment of the international GHG emissions market,[42] where the turnover of GHG emissions accounting units would take place. All three 'flexibility mechanisms' are "essentially trading mechanisms"[43] and, hence, their implementation could benefit from integration into multilateral trading system governed by the WTO[44].

Article 18 of the Kyoto Protocol envisaged establishment of the procedures and mechanisms that enable COP to determine and address the cases of non-compliance with the Protocol's provisions. The Kyoto Protocol also contributed to further development of the international institutional framework on climate change. It recognized some institutions of the UNFCCC as bodies of the Protocol (e.g. the COP and the Secretariat of the Convention serve as the meeting of the Parties to this Protocol (MOP) and its secretariat respectively, the GEF is entrusted to operate Kyoto Protocol's financial mechanism) and established new institutions – the Clean Development Mechanism (CDM) Executive Board, Article 6 Supervisory Committee and Compliance Committee.

Therefore, the Kyoto Protocol sufficiently strengthened the international climate change regime. However, some aspects of this regime were left unsettled due to the technical complexity and political sensitivity of certain issues covered by

[41] So called Kyoto mechanisms include joint implementation (Article 6), the clean development mechanism (Article 12) and the emissions trading system (Article 17).

[42] Brack, D., Grubb, M., Windram, C., *International Trade and Climate Change Policies*, Royal Institute of International Affairs, London, 2000, p. xxii.

[43] Ibid.

[44] It should be noted that many environmental issues, including climate change, are closely related to or have impact on international trade. However, they are not explicitly covered by the outcomes of the Uruguay round of multilateral trade negotiations. Often, implementation of international obligations undertaken by Parties to multilateral environmental and trade agreements leaves room for different interpretation of such international obligations. To date disputes regarding interpretation of conflicting international environmental and trade obligations have not been considered within the WTO dispute settlement mechanism. However, certain legal adjustments are needed in order to avoid conflicts between international environmental and trade obligations in the future and ensure coherence between international legal regimes that govern environmental protection and international trade.

the Kyoto Protocol. Elaboration of detailed rules related to the implementation of the Kyoto Protocol commitments, operation of the 'flexibility mechanisms' and the system of compliance enforcement as well as some other issues (such as institutional developments) had been considered by the subsequent COPs and was finalized at the seventh session of the COP held in Marrakesh, Morocco, in November 2001 with the adoption of the Marrakesh Accords.[45]

1.3. The outcomes of the recent UN Climate Change Conferences: from Copenhagen to Durban

Hopes regarding further elaboration of the international climate change regime were tied to the fifteenth session of the COP and the fifth session of the MOP that were held in Copenhagen, Denmark, from 7 to 19 December, 2009. Parties to the UNFCCC and Kyoto Protocol were expected to strike a new global deal on climate change and agreed on the new GHG emissions reduction commitments for the post-Kyoto period which starts as of 2013. However, despite the highest level of representation the COP15/MOP5 failed to reach substantial progress in advancing the climate regime further. The fifteenth session of the COP resulted in the Copenhagen Accord[46] – the political rather than legal agreement that was initially reached among 28 countries.

International negotiations of the future climate regime are running through two parallel channels. Since 2005, Annex I Parties, except the US, have negotiated amendments to the Protocol, including the new emissions reduction targets for the second commitment period, within the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AHW-KP)[47]. Non-Annex I Parties and the US have engaged in talks over the development of an 'agreed outcome' under the UNFCCC within the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AHG-LCA)[48]. According to the Bali Action Plan[49] an 'agreed outcome' of negotiation within the AHG-LCA shall include "a shared long-term vision; mitigation commitments or actions by developed countries; nationally appropriate mitigation actions by developing countries; financial

[45] The Marrakesh Declaration and the Marrakesh Accords, *in* COP Report No. 7, Addendum, UN Doc. FCCC/ CP/2001/13/Add.1 (Jan. 21, 2002).

[46] Copenhagen Accord Decision 2/CP.15 (Dec. 18, 2009), in COP Report No. 15, Addendum, at 5, UN Doc. FCCC/CP/2009/11/Add.1 (Mar. 30, 2010).

[47] Bodansky, D., "The Copenhagen Climate Change Conference: A Postmortem", The American Journal of International Law, Vol. 104, No. 2 (April 2010), p. 233.

[48] Ibid.

[49] Bali Action Plan, Decision 1/CP.13 (Dec. 14–15, 2007), in COP Report No. 13, Addendum, at 3, UN Doc. FCCC/CP/2007/6/Add.1 (reissued Mar. 14, 2008).

arrangements; measures to address adaptation and technology transfer; and a system for measurement, reporting, and verification."[50]

The specificity of the climate negotiations process left some important issues related to legal form and status of the future climate regime open. Parties to the UNFCCC and its Kyoto Protocol are unable to reach consensus on whether the negotiations outcome(s) must be legally binding and whether they imply an amendment of the Kyoto Protocol or an adoption of a new, comprehensive international instrument based on the UNFCCC which would extend legally binding commitments to cut emissions on all major emitters, including developing countries. Or a combination of both.

Deferent vision of the post-Kyoto climate regime, reflected in countries' positions, led to the failure of the COP15/MOP5 that were unable to amend current or conclude new climate change agreement(s) as well as to determine their legal form and status. The Copenhagen Accord, the political agreement that saved the Climate Conference from complete failure, had been reached at the last minute among 28 counties, including major GHG emitters. It was not adopted by the Conference due to the position of a small group of countries (Bolivia, Cuba, Nicaragua, Sudan, Venezuela and Tuvalu)[51]. As of September 2011, 141 countries associated themselves with the Copenhagen Accord. However, this document imposed only political commitments.

The Copenhagen Accord included the following key elements which can be characterized as modest progress, giving some chance of reaching an agreement on climate change in the future. For the first time, the Copenhagen Accord set the objective of long-term cooperative action. Parties that supported this document agreed that "deep cuts in global emissions are required according to science . . . so as to hold the increase in global temperature below 2°C."[52] They also recognized the need to "cooperate in achieving the peaking of global and national emissions"; however, developing counties refused to include a date in the Copenhagen Accord.[53] The Copenhagen Accord did not set emissions reduction targets for Annex I Parties for the post-2012 period. Instead, Annex I Parties committed "to implement

[50] Bodansky, D., "The Copenhagen Climate Change Conference: A Postmortem", The American Journal of International Law, Vol. 104, No. 2 (April 2010), p. 233.

[51] Bodansky, D., "The Copenhagen Climate Change Conference: A Postmortem", The American Journal of International Law, Vol. 104, No. 2 (April 2010), p. 230-231.

[52] Copenhagen Accord, paragraph 2.

[53] Ibid.

individually or jointly the quantified economy wide emissions targets for 2020", implementation of which would be subject to international measurement, reporting and verification. Those Annex I Parties that are Party to the Kyoto Protocol additionally committed "to further strengthen the emissions reductions initiated by the Kyoto Protocol."[54] The Copenhagen Accord also 'internationalized' national climate change policies of developing countries.[55] In paragraph 5, for the first time, developing countries "agreed to reflect their national emissions reduction pledges in an international instrument, to report on their GHG inventories and their mitigation actions in biennial national communications, and to subject their actions either to international measurement, reporting and verification (for internationally supported actions) or to 'international consultations and analysis under clearly defined guidelines that will ensure that national sovereignty is respected' (for domestically supported actions)."[56]

The Copenhagen Accord also addressed the issue of financial and technological support of developing countries' efforts aimed at climate change mitigation and adaptation. The developed countries collectively committed "to provide new and additional resources . . . approaching USD 30 billion for the period 2010–2012 with balanced allocation between adaptation and mitigation" as well as "in the context of 'meaningful mitigation actions and transparency on implementation' to mobilize jointly [through a wide variety of sources] USD 100 billion dollars a year by 2020 to address the needs of developing countries."[57]

Finally, the Copenhagen Accord required establishing a Copenhagen Green Climate Fund as "an operating entity of the Convention's financial mechanism to support projects, program, policies and other activities in developing countries related to mitigation."[58]

The Copenhagen Accord was heavily criticized by both climate change skeptics and proponents of strong climate actions. Only optimists could expect substantial progress in climate change talks[59] in the aftermath of the biggest recession since the Great Depression, taking into account the complexity and

[54] Copenhagen Accord, paragraph 4.

[55] Bodansky, D., "The Copenhagen Climate Change Conference: A Postmortem", The American Journal of International Law, Vol. 104, No. 2 (April 2010), p. 240.

[56] Ibid.

[57] Copenhagen Accord, paragraph 8.

[58] Copenhagen Accord, paragraph 10.

[59] Especially to set legally binding quantified limitation and reduction commitments for developed and major developing countries for the post-2012 period.

political sensibility of the issues involved, conflicting national interests of the Parties as well as the economic consequences of the measures considered. Nonetheless, the COP15 and its final document reflected the attitude of countries to the future climate regime, the gaps in their positions and indicated some elements that may be elaborated further with the aim of including them in the new global climate change deal. At the same time, Copenhagen climate negotiations outcomes posed a potential threat that the UNFCCC might lose its central and exclusive role in international climate change architecture. Instead, the group of countries may decide to proceed unilaterally or plurilaterally in spite of almost certain political and economic tensions that such a decision would cause.

The outcomes of the sixteenth session of the COP and the sixth session of the MOP in Cancun instilled cautious optimism that the international efforts to strike the global climate change deal would be continued. Although, COP16/MOP6 in Cancun did not resulted in adoption of the global climate deal, it managed to put the international climate talks back on track.

Parties changed negotiations tactics. The resolution of the most controversial issues of the post-Kyoto climate regime[60] was postponed. Instead, the COP16/MOP6 concentrated efforts on other important areas where the gap in positions could be bridged and the progress was anticipated, i.e. system of monitoring, reporting and verification; climate adaptation; financial and technological support of developing countries and capacity building.

The COP16/MOP6 final documents, Cancun Agreements[61], reinforced and elaborated some of the achievements reflected in the Copenhagen Accord. In the Cancun Agreements Parties affirmed their vision for long-term cooperative action.[62] They also agreed "to work towards identifying a time frame for global peaking of GHG emissions . . . and to consider it at the seventeenth session of the COP".[63]

The COP16 considered and made significant progress in the area of climate adaptation. Among others outcomes Parties established the Cancun Adaptation

[60] I.e. the form and legal status of the climate negotiations outcomes, the setting of binding quantified economy-wide emissions reductions targets for Annex I Parties and major emerging economies.

[61] Cancun Agreements, Decision 1/CP.16 (Dec. 10-11, 2010), in COP Report No. 16, Addendum, at 3, UN Doc. FCCC/CP/2010/7/Add.1 (Mar. 15, 2011).

[62] I.e. the necessity of 'deep cuts in global GHG emissions' in order to 'hold the increase in global average temperature below 2 °C above preindustrial levels' (Cancun Agreements, paragraph 4) and 'achieving the peaking of global and national greenhouse gas emissions as soon as possible' (Cancun Agreements, paragraph 6).

[63] Cancun Agreements, paragraph 6.

Framework "with the objective of enhancing action on adaptation",[64] and the Adaptation Committee with the aim of promoting "the implementation of enhanced action on adaptation in a coherent manner".[65]

Another important area where the COP16 reached noticeable progress was the implementation of the nationally appropriate mitigation actions by developed and developing countries that pledged to cut their GHG emissions according to the self-set reduction targets. The Cancun Agreements elaborated further the system of measurement, reporting and verification that applied to mitigation measures implemented by both Annex I and non-Annex I Parties.

The Cancun Agreements also advanced other important areas of international cooperation aimed at addressing climate change. They established the system of gradual implementation of mitigation actions by developing countries in the forest sector by reducing emissions from deforestation and forest degradation; conservation of forest carbon stocks; sustainable management of forests and enhancement of forest carbon stocks.[66] A system of financial and technological support of developing countries' efforts to implement their climate mitigation and adaptation measures was enhanced by establishment of a Green Climate Fund, "designated as an operating entity of the financial mechanism of the Convention under Article 11"[67] and a Technological Mechanism, which would consist of a Technology Executive Committee and Climate Technology Centre and Network.[68]

Therefore, results of the COP16/MOP6 in Cancun addressed a limited set of issues, implementation of which would facilitate further climate change negotiations. The next, seventeenth session of the COP and seventh session of the MOP (COP17/MOP7) in Durban, South Africa, will attempt to find solution to the most difficult and controversial issues that constitute the key elements of the post-2012 climate change regime, i.e. the legal form and status of international climate change negotiations outcomes and the setting of legally binding commitments for major GHG emitters (Annex I Parties and emerging economies) to limit and/or reduce their emissions after 2012. However, expectations that the new global climate change deal may be struck in Durban are very low. The gap in positions of the Parties looks too

[64] Ibid, paragraph 13.

[65] Ibid, paragraph 20.

[66] Ibid, paragraphs 70 and 73.

[67] Ibid, paragraph 102.

[68] Ibid, paragraph 117.

wide to bridge it. Most probably negotiations over the new, comprehensive climate change agreement will be continued after the Climate Change Conference in Durban.

2. Multilateral agreements on subsidies and environmental protection

Several multilateral agreements on trade in goods, i.e. the General Agreement on Tariffs and Trade (GATT), Agreement on Subsidies and Countervailing Measures (ASCM) and Agreement on Agriculture (AoA), included in the Annex I to the Marrakesh Agreement Establishing the World Trade Organization (WTO Agreement), set out international rules on subsidies and subsidized trade, which are legally binding for all WTO Members.[69] They were negotiated and adopted during the Uruguay Round of multilateral trade negotiations (1986 – 1994). Understanding on Rules and Procedures Governing the Settlement of Disputes (Dispute Settlement Understanding or DSU) is another multilateral, legally binding agreement annexed to the WTO Agreement that, among other functions, strengthened enforcement of WTO Members' rights and obligations under the covered Agreements, i.e. those agreements that annexed to the WTO Agreement, including GATT, ASCM and AoA, and, thus, substantially increase WTO Members' compliance with multilateral rules on subsidies and subsidized trade.

Since the 1970s, a considerable number of multilateral environmental agreements (MEA) have been concluded. Only a few MEAs deal with environmental issues that have global implications and employ trade-related measures to ensure achievement of their objectives. These MEAs "address a wide variety of issues, ranging from toxic substances to endangered species, from air pollution to biodiversity."[70] Apart from the UNFCCC and its Kyoto Protocol the other key MEAs are the Convention on International Trade in Endangered Species; the Vienna Convention for Protection of the Stratosphere, and the Montreal Protocol on Substances that Deplete the Stratospheric Ozone Layer; The Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal; Convention on Biological Diversity and the Cartagena Protocol on Biosafety, Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Stockholm Convention on Persistent Organic Pollutants (POPS). Despite some overlap in coverage "the actual conflicts between WTO law and trade-related provisions in

[69] As of September 2011 there are 153 Members of the WTO.

[70] *Environment and Trade. A Handbook*, 2nd Edition, United Nations Environment Programme, International Institute for Sustainable Development Published by the International Institute for Sustainable Development, 2005, p. 15.

MEAs, though, have been rare."[71] Most of the environment-related cases addressed by the WTO dispute settlement system so far have involved application of unilateral trade-restrictive measures related to the protection of the environment.

2.1. Brief overview of the WTO rules on subsidies

Subsidies, as a form of governmental assistance, are the legitimate and widely used instrument of economic and social policy of any state. Central and local governments use subsidies to pursue a broad variety of goals. From an economic perspective, subsidization may contain ambivalent effects. Often subsidies help to address market failures and promote other public policy objectives. However, the positive effect of subsidization is difficult to estimate because its success depends on many other internal and external factors, including those that are outside of the governmental authority and control. The negative effect of subsidization is very well known. They tend to transfer public funds to inefficient producers, interfere in the resource allocation within the economy of subsidizing nation and globally, change competitive relationships between like products in favor of the subsidized one and affect economic and trade interests of other countries. Nonetheless, subsidization must remain in the governmental toolbox as an instrument that allows pursuing public policy goals, redistributing public revenues and promoting economic and social development.

The GATT 1947 made the first cautious, attempt to establish multilateral rules on subsidies and subsidized trade. Relatively weak rules on subsidization established by the GATT 1947 reflected the objective necessity to rebuild Contracting Parties' economies after the World War II. Governmental assistance was able to contribute greatly to post-war reconstruction and development. Recognizing the role of subsidies in promotion of the public policy objectives, Article II:4 of GATT 1947 authorized the use by Contracting Parties of "any form of assistance to domestic producers" provided that it was not prohibited by other provisions of this Agreement. Moreover, Article III:8(b) of GATT 1947 excluded subsidies paid by Contracting Parties "exclusively to domestic producers" from their national treatment obligations. Although the GATT 1947 acknowledged the potential adverse effects of subsidization and subsidized trade to the interests of Contracting Parties, Articles VI and XVI of this Agreement did not adequately address so called 'unfair' trade practices, i.e. dumping and subsidization, and their consequences.

[71] Ibid, p. 19.

The GATT 1947 did not define the concepts of 'subsidy' or 'subsidization'. Consequently, the GATT Contracting Parties were able to interpret these concepts freely.[72] Essentially, the GATT 1947 permitted subsidization in general, including "any form of income or price support, which operates directly or indirectly to increase exports of any product from, or to reduce import of any product into", the territory of any Contracting Party.[73] A Contracting Party that had granted or maintained a subsidy was only required to formally notify the subsidy to the other Contracting Parties and to provide other information regarding its "estimated effect" on trade and "circumstances making the subsidization necessary" as well as to "discuss with other . . . parties concerned the possibility of limiting the subsidization."[74] Despite explicit recognition of the potential harmful effect of the export subsidies to the economic interests of the Contracting Parties[75], the GATT 1947 only encouraged Contracting Parties to "seek to avoid the use of subsidies on the export of primary products" or, at least, not to apply them "in a manner which results in . . . having more than equitable share of world export trade in that [primary] product".[76] The ambiguous meaning of the term "equitable share" made this weak provision even more useless. In addition, the majority of the GATT Contracting Parties failed to implement the obligation to phase out until January 1, 1958 "any form of subsidy on export of any product other than a primary product" if export of subsidized product occurs at price lower than "the comparable price charged for the like product to buyers in the domestic market".[77] This obligation was implemented by small group of developed Contracting Parties in 1962.

The GATT authorized its Contracting Parties to remedy actual and potential material injury caused by foreign subsidization to domestic industry by levying a countervailing duty (CVD)[78] on the importation of any subsidized product to its territory[79] – even though its rules on offsetting consequences of foreign subsidization

[72] Economic policy priorities and financial performance of each Contracting Party guided its decision whether to apply broad, narrow or special concept of subsidy or subsidization.

[73] The GATT 1947, Article XVI:1.

[74] Ibid.

[75] Ibid, Article XVI:2.

[76] Ibid, Article XVI:3.

[77] Ibid, Article XVI:4.

[78] The last sentence of Article XVI:3 of the GATT 1947 determined the term 'countervailing duty' as 'a special duty levied for the purpose of offsetting any bounty or subsidy bestowed, directly, or indirectly, upon the manufacture, production or export of any merchandise'.

[79] The GATT 1947, Article VI:3.

were not clear and comprehensive.[80] For instance, the GATT 1947 did not envisage legal ground for challenging a harmful subsidy per se.[81] In many cases a CVD imposed on import of a subsidized product was irrelevant and useless for offsetting the harm caused to the domestic industry outside the customs territory of a country entitled to recourse to a unilateral action.

In the late 1950s – 1960s the group of the Contracting Parties had reached significant progress in rebuilding their economies and industries, the competition among which increased substantially. Moreover, economic recovery restored public funds that could be used to promote further economic expansion of the domestic industries. The weakness of the GATT 1947 rules on subsidies and subsidized trade and the tendency to use subsidization for protectionist purposes or abuse the right to impose CVDs induced Contracting Parties to seek strengthening rules on subsidization and subsidized trade. The Tokyo Round of multilateral trade negotiations (1973 – 1979) resulted in the conclusion of the plurilateral Agreement on Interpretation and Application of Articles VI, XVI and XXIII of the General Agreement, commonly referred to as the Tokyo Round Subsidies Code.[82] It elaborated and strengthened GATT rules with respect to export subsidies, imposition of countervailing measures and called for avoiding provision of subsidies that caused adverse effects to the interests of Contracting Parties. In spite of the progressive elaboration of rules on subsidization and subsidized trade this legal instrument did not bring desired legal clarity and did not reduce the number of disputes.[83] Besides, only 24 Contracting Parties accepted the Tokyo Round Subsidies Code.

The mandate of the Uruguay round of multilateral trade talks implied revision of Articles VI and XVI of GATT 1947 and the Tokyo Round Subsidies Code. It resulted in the ASCM that greatly strengthened the international discipline on subsidization and subsidized trade in goods[84]. Among others, the ASCM determined the concept of a 'subsidy', explicitly prohibited subsidies contingent upon export

[80] Van Den Bossche, P., 2008, *The law and policy of the World Trade Organization*, Cambridge: Cambridge University Press, 2nd edition, p. 559.

[81] Jackson, J. H., *The World Trading System*, Cambridge, MA: MIT Press, 1997, 2nd ed., Chapter 11, pp. 280-281.

[82] Van Den Bossche, P., 2008, *The law and policy of the World Trade Organization*, Cambridge: Cambridge University Press, 2nd edition, p. 559.

[83] Ibid, pp. 559-560.

[84] It should be noted that agricultural subsidies are disciplined by both the ASCM and AoA. By virtue of Article 21 of the AoA 'provisions of GATT 1994 and other Multilateral Trade Agreements in Annex 1A to the WTO Agreement [including the ASCM] shall apply subject to the provisions of this Agreement'. It means that provisions of the AoA on agricultural subsidies shall prevail over the ASCM rules in case of their conflict.

performance (export subsidies) or upon the use of domestic over imported products (import substitution subsidies), entitled WTO Members affected by subsidized trade to challenge legitimacy of a subsidy as such in the WTO and to seek its withdrawal or removal of its adverse effect, established relatively detailed substantive and procedural rules for offsetting adverse effects of a subsidized trade.

The definition of a subsidy determined the scope and coverage of the multilateral rules on subsidization and subsidized trade. It was important to ensure that only those forms of governmental assistance that might affect economic and trade interests of the WTO members would be targeted while legitimate ones would be left outside of the scope of the ASCM. Article 1 of the ASCM attempted to strike such a balance and provided for "an internationally agreed-upon definition of subsidy for use both generally and in determining what specific practices are actionable."[85] According to Article 1 of the ASCM a subsidy, "regardless of whether it is actionable"[86] exists if there is "a financial contribution by a government or any public body within the territory of a Member"[87] or "any form of income or price support in the sense of Article XVI of GATT 1994"[88] that "confers a benefit"[89] on a recipient, i.e. an advantage that would not exist under normal market conditions without governmental intervention.[90]

Only four types of a financial contribution made by a government (regardless of central or local)[91] may constitute a subsidy within the meaning of the ASCM provided that they confer a benefit on a recipient. These four types of financial contribution are: (i) a direct transfer of funds, potential direct transfer of funds or liabilities; (ii) forgone or not collected government revenue that is otherwise due;[92] (iii) provision of goods or services by a government other than general infrastructure, or

[85] Horlick, G. N. and Clarke, P. A. "The 1994 WTO Subsidies Agreement", *World Competition* 17(4), 1994, p. 41.

[86] Ibid, p. 42.

[87] The ASCM, Article 1:1.1(a)(1).

[88] Ibid, Article 1:1.1(a)(2).

[89] Ibid, Article 1:1.1(b).

[90] Jackson, J. H., *The World Trading System*, Cambridge, MA: MIT Press, 1997, 2nd ed., Chapter 11, pp. 293-296.

[91] Including a public body (an entity that controlled by the government or the other public bodies) or, even, a private body, provided that it is 'entrusted or directed' by a government or a public body to carry governmental functions.

[92] According to Ad note to Article XVI of the GATT 1994, the footnote 1 and the provisions of Annexes I through III of the ASCM 'the exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption, or the remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed to be a subsidy'.

purchase of goods by a government; and (iv) governmental payments to a funding mechanism. However, there might be a number of measures, practices, schemes and mechanisms that could be associated with one of the types of financial contribution listed above (e.g. grants, loans, equity infusion, loan guarantees, different fiscal incentives, etc.). Any form of income or price support within the meaning of Article XVI of GATT 1994 that confers a benefit on a recipient could also constitute a subsidy under Article 1:1(a)(2) of the ASCM. These mechanisms are often used in the production of and trade in commodities, especially the basic agricultural products.[93] Therefore, a subsidy within the meaning of the ASCM exists when two separate constituting legal elements are present – there is a governmental transfer of any resources (financial contribution, income or price support) that represent certain value (a benefit) to the recipient.[94] It means that a subsidy does not exist if a financial contribution by a government does not confer a benefit on a recipient or a government confers a benefit without making a financial contribution.[95]

The governmental assistance that qualifies for the definition of a subsidy within the meaning of the ASCM has to be 'specific' in order to be actionable under this Agreement. Specificity implies that the access to a subsidy in question is explicitly (i.e. by means of legal document or formal decision of the granting authority) or implicitly (i.e. by means of other factors that determine the actual access to a subsidy and/or the practice of its allocation) limited to 'certain enterprises', i.e. "an enterprise or industry or group of enterprises or industries"[96], including to those "located within a designated geographical region within the jurisdiction of the granting authority"[97]. Specificity of a subsidy does not exist if it is "sufficiently broadly available throughout an economy as not to benefit a particular limited group of producers of certain products"[98] on the basis of established "objective criteria or conditions governing the eligibility for, and the amount of, a subsidy, . . . provided that the

[93] Mavroidis, P.C., Messerlin, P. A., Wauters, J. M., *The Law and Economics of Contingent Protection in the WTO*, Edward Elgar Publishing, 2008, p. 323.

[94] Panel Report, *United States – Preliminary Determinations with Respect to Certain Softwood Lumber from Canada*, WT/DS236/R, dated 27 September 2002, paragraph 7.24 and Report of the Panel, *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada,* WT/DS257/R, dated 29 August 2003, paragraph 7.26.

[95] Mavroidis, P.C., Messerlin, P. A., Wauters, J. M., *The Law and Economics of Contingent Protection in the WTO*, Edward Elgar Publishing, 2008, p. 301.

[96] The ASCM, Article 2.1.

[97] Ibid, Article 2.2.

[98] Report of the Panel, *United States – Subsidies on Upland Cotton*, WT/DS267/R, dated 25 March 2005, paragraph 7.1142.

eligibility is automatic and that such criteria and conditions are strictly adhered to".[99] The objective criteria and conditions have to be: "(i) neutral[100] (i.e. do not favor certain enterprises over others); (ii) economic in nature and horizontal in application (e.g. a subsidy is available to small and/or medium enterprises regardless of the field of their activity or geographical location)[101] and (iii) clearly spelled out in [domestic legislation or other] official document so as to be capable of verification"[102]. A subsidy may in fact be specific, regardless its formal correspondence to the principles that allow qualifying it as a non-specific one. The other factors, such as actual use of subsidy, the manner of its allocation and exercising of discretion by the granting authority in taking the decision to grant a subsidy, must be considered in order to decide whether a subsidy is *de facto* specific.[103] Two prohibited types of subsidies, i.e. export and import substitution subsidies, "are deemed to be specific" per se[104] and, thus, "no further examination of the specificity of such subsidies needs to be undertaken".[105] Therefore, non-specific subsidies fall out of the scope of the international discipline on subsidization and subsidized trade, i.e. they are neither prohibited nor actionable under the WTO law. However, non-specific subsidies granted or maintained by a WTO Member also may cause adverse effect to the interests of other Members as they have certain effect on the competitive relationship between subsidized and other products by virtue of conferring a benefit to the recipients of a subsidy.[106] The enterprises that have access to non-specific subsidy obtain an additional competitive advantage over their competitors abroad that may be injured by subsidized products whether competing with subsidized products on the market of subsidizing Member, their domestic markets or third countries' markets.

Originally, the ASCM distinguished three categories of subsidies – prohibited or so called 'red light' subsidies, actionable or 'yellow light' subsidies and non-actionable or 'green light' subsidies, that fell under the scope of this Agreement and established internationally agreed-upon rules for each category. However, from January 1, 2000 rules on non-actionable subsidies expired because WTO Members

[99] The ASCM, Article 2.1(b).

[100] Ibid, Footnote 2.

[101] Ibid.

[102] The ASCM, Article 2.1(b).

[103] Ibid, Article 2.1(c).

[104] Ibid, Article 2.3.

[105] Mavroidis, P.C., Messerlin, P. A., Wauters, J. M., *The Law and Economics of Contingent Protection in the WTO*, Edward Elgar Publishing, 2008, p. 351.

[106] Ibid, pp. 350-351.

decided not to extend them. Since that time the ASCM has dealt only with two categories of subsidies – prohibited and actionable.

The ASCM outlaws subsidies contingent in law or in fact upon export performance or upon the use of domestic over imported goods.[107] WTO Members must neither grant nor maintain export and import substitution subsidies[108], except export subsidies on agricultural products[109] that are regulated by the AoA,[110] regardless of their effect on the interests of other WTO members. Consequently, if a subsidy in question is found to be a prohibited one, the subsidizing WTO Member shall withdraw such subsidy without delay.[111] Withdrawal is the only possible remedy that applies to a prohibited subsidy. The issue of a subsidy's withdrawal is a complicated one and many of its aspects remain vague and unsettled.[112] Taking into consideration the distortive nature of these two types of subsidies, Article 4 of the ASCM provides for special, more stringent procedural rules for prompt settlement of disputes over granting or maintaining of prohibited subsidies.

Essentially, all subsidies within the meaning of Article 1 of the ASCM[113] that distort trade or cause adverse effects to the interests of the WTO Members are actionable under the ASCM. Prohibited subsidies could also be actionable as their adverse effects on the interests of the WTO Members are presumed. However, the main purpose of Part III of the ASCM that deals with actionable subsidies is to provide legal means for offsetting adverse effects on the interests of the WTO Members of subsidies that are legitimate under the WTO law, i.e. those subsidies that are not de jure or de facto depend on export performance or use of domestic over imported products.

A subsidy in question becomes actionable from the moment when it is proved on the basis of positive, i.e. an affirmative, objective, credible and verifiable,[114] evidence to cause any of the following form of adverse effect to the interests of other

[107] However, by virtue of Article 27.2(a) of the ASCM least developed Members may provide 'subsidies contingent upon export performance'.

[108] Ibid, Article 3.2.

[109] Products listed in Annex 1 to the AoA.

[110] The ASCM, Article 3.1, the AoA, Articles 3.3, 9, and 10.

[111] The ASCM, Article 4.7.

[112] Mavroidis, P.C., Messerlin, P. A., Wauters, J. M., *The Law and Economics of Contingent Protection in the WTO*, Edward Elgar Publishing, 2008, pp. 421-425.

[113] Except agricultural subsidies as provided in Article 5 of the ASCM and Article 13 of the AoA.

[114] Report of the Appellate Body, *US – Anti Dumping Measures On Certain Hot-rolled Steel Products From Japan*, WT/DS184/AB/R, dated 24 July 2001, paragraph 192.

WTO Members: (i) injury to the domestic industry; (ii) nullification or impairment of benefits within the meaning of Article XXIII of GATT 1994; and (iii) serious prejudice to the interests of another WTO Member.[115]

Injury to the domestic industry is a form of adverse effect that implies material, i.e. actual, which is less stringent than serious, injury or threat of injury, i.e. potential injury, or material retardation of the establishment of such industry.[116] In order to prevent use of the multilateral rules that discipline subsidization and subsidized trade with protectionist purposes, the WTO Member that considers its domestic industry injured by subsidization which occurred in other Member, shall conduct thorough examination and evaluation of the totality of the relevant facts, economic and other factors related to the effect of subsidized import on the performance of the domestic industry that produce like products. Such examination and evaluation implies assessment of many relevant factors, not one or several of which are decisive. Part V of the ASCM sets out rules for application of countervailing measures with the aim of offsetting the injury to the domestic industry caused by subsidizing import.

Interests of WTO Members may be also affected by a subsidy when the benefits accruing to them directly or indirectly under the GATT 1994 in particular the benefits of concessions bound under Article II of GATT 1994 are nullified or impaired as a consequence of foreign subsidization. The existence of 'nullification or impairment' must be established in accordance with the practice of application of Article XXIII of GATT 1994. Consequently, the benefits of the WTO Members under GATT 1994 could be nullified or impaired only by subsidies that 'systematically offset or counteract'[117] such benefits as a result of (a) infringement by a Member its obligations under the WTO Agreement[118] (i.e. provision of export or import substitution subsidies that are prohibited by the ASCM), or (b) "the application by a

[115] The ASCM, Article 5.

[116] The ASCM, Article 15; The GATT 1994, Article VI:6(a).

[117] Panel Report, *European Economic Community - Payments and Subsidies Paid to Processors and Producers of Oilseeds and Related Animal-Feed Proteins*, L/6627, dated 14 December 1989 and published as BISD 37S/86, paragraph 148 and Panel Report, *United States – Continued Dumping and Subsidy Offset Act of 2000*, WT/DS217/R and WT/DS234/R, dated 16 September 2002, paragraph 7.127.

[118] These subsidies (except export subsidies on agricultural products, provision of which is disciplined by the AoA) fall under the scope of Article XXIII:1(a) of the GATT 1994 and Article 3.8 of the DSU.

Member of any measure, whether or not it conflicts with [the WTO Agreement]"[119] (i.e. other subsidies that are not prohibited per se by the WTO law).[120]

Serious prejudice to the interests of another WTO Member refers to the third form of adverse effect on the interests of WTO Members that may be caused by subsidization. In order to establish the existence of serious prejudice to the interests of another WTO Member, Article 6 of the ASCM requires demonstration of the existence of one out of four situations when negative effect of a subsidy results in: (a) displacement or impediment of imports of a like product of another Member into the market of the subsidizing Member; (b) displacement or impediment of exports of a like product of another Member from the third country; (c) a significant price undercutting, price depression or price suppression in any market, as long as the effects are felt in the same market, which may be the world market; and (d) an increase in the world market share of the subsidizing Member as compared to the average share it had over a relevant period of time during which subsidies have been granted in the case of subsidies for primary products or commodities.[121]

Established existence of a causal relationship between a subsidy and the adverse effects listed in Article 5 of the ASCM is a necessary condition for taking actions against foreign subsidization and subsidized trade. In order to make sure that the adverse effects are attributable only to a subsidy, other factors, which may cause negative effect to the interests of WTO Members or reduce the significance of adverse effects of a subsidy in question, should also be taking into consideration.

A WTO Member that grants or maintains an actionable subsidy that has been proven to cause adverse effects to the interests of other WTO Members must remove its adverse effects or withdraw a subsidy. In case of established injury to domestic industry WTO Member may offset adverse effect of foreign subsidization either unilaterally by imposing CVDs, or multilaterally by requesting removal of the adverse effects caused by the subsidy or its withdrawal.[122] Moreover, unilateral action brings relatively prompt but limited relief to the domestic industry injured by the

[119] These subsidies (except subsidies on agricultural products, provision of which is disciplined by the AoA) fall under the scope of Article XXIII:1(b) of the GATT 1994 that deals with so-called 'non-violation' complaints.

[120] Mavroidis, P.C., Messerlin, P. A., Wauters, J. M., *The Law and Economics of Contingent Protection in the WTO*, Edward Elgar Publishing, 2008, pp. 431-432.

[121] Ibid, pp. 435-437.

[122] However, the ASCM does not provide an answer how to offset a subsidy that ceased to exist but its adverse effects to the interests of WTO Members remains.

subsidizing import while multilateral action offers a comprehensive but protracted solution to the negative effect caused by subsidized trade.[123]

Part IV of the ASCM contained rules that regulated provision of subsidies within the meaning of Article 1 which were considered as 'non-actionable'. The scope of non-actionable subsidies covered forms of governmental assistance that could contribute to the environmental protection endeavors, including climate change response. Besides subsidies which are not specific within the meaning of Article 2 of the ASCM, Articles 8.1 and 8.2 of this Agreement recognized the following specific subsidies as non-actionable, provided that certain criteria and conditions are observed: (a) assistance for research activities conducted by firms or higher education or research establishments on a contract basis with firms; (b) assistance to disadvantaged regions within the territory of a Member; and (c) assistance to promote adaptation of existing facilities to new environmental requirements imposed by law and/or regulations which result in greater constraints and financial burden on firms. Members had to notify and update annually all subsidies for which provisions of Article 8.2 were invoked.

Subsidies and subsidized trade in agricultural products are covered by the AoA and the ASCM to the extent that its provisions do not conflict with the provisions of the AoA. The ASCM applies horizontally to trade in goods, including trade in agricultural products. The ASCM provisions supplement and clarify the provisions of the AoA (i.e. apply to the extent that they are not in conflict with each other, otherwise the AoA provisions prevail; fill in the gaps and loopholes in the AoA; and constitute source of contextual interpretation of the AoA provisions). Special treatment of agricultural subsidies reflects the specific place of agricultural production and trade in the multilateral trading system.

The AoA sets out rules related to trade in agricultural products. Essentially, it deals with three pillars: (i) market access issues (tariff and non-tariff barriers); (ii) domestic support commitments; and (iii) export subsidies commitments.[124] The AoA distinguishes two forms of the governmental assistance in agricultural sector – domestic support measures (i.e. domestic subsidies) and export subsidies. One of the AoA objectives was to classify subsidies on agricultural products, cap the trade

[123] Mavroidis, P.C., Messerlin, P. A., Wauters, J. M., *The Law and Economics of Contingent Protection in the WTO*, Edward Elgar Publishing, 2008, p. 462.

[124] Desta, M., "The Evolution of the WTO Agreement on agriculture from its Uruguay Round Origins to Its Post-Hong Kong Directions", May 2006, FAO Legal Office, p. 3, available at: http://www.fao.org/legal/prs-ol/lpo55%20.pdf

distortive ones and make them subject to reduction commitments.[125] Thus, the AoA insulated those agricultural subsidies that are consistent with its provisions from most of the ASCM rules on subsidies and subsidized trade. Moreover, by virtue of Article 13 of the AoA WTO Members had to "show due restraint before initiating either domestic market trade defense instruments or WTO dispute settlement proceedings against agricultural subsidies." [126] These special 'due restraint' rules also known as a 'peace clause' applied to agricultural subsidies during the 9-year period of implementation of this Agreement – from 1 January 1995 to 1 January 2004. According to Article 13 of the AoA domestic support measures that confirmed fully with Annex 2 to this Agreement were absolutely non-actionable, i.e. WTO Members could neither challenge them multilaterally nor remedy them with countervailing measures; domestic support measures that confirmed fully with Article 5 and 6 of the AoA were excluded from countervailing measures or multilateral actions, unless other WTO Members established an injury or threat thereof or these measures granted support to a specific commodity in excess of certain baseline determined during the 1992 marketing year; export subsidies that confirmed fully with Part V of the AoA were excluded from countervailing measures or multilateral actions, unless other WTO Members established an injury or threat thereof.[127]

The AoA classifies and disciplines domestic support measures on agricultural products depending on the magnitude of their trade distortive effects. All trade distortive domestic support measures "are in principle prohibited unless specifically permitted."[128] However, those WTO Members (most of them developed countries) that had granted trade- and production distortive domestic subsidies on agricultural products during the base period (1986 – 1988) and listed them in their schedules of concessions were entitled to continue granting such subsidies, provided that they are subject to the reduction commitments. These trade- and production distortive domestic support measures, so-called 'amber box measures', shall be quantified on the basis of the Aggregate Measurement of Support (AMS) in accordance with Annex 3 to the AoA and gradually reduced in accordance with commitments specified in

[125] O'Connor, B., "Subsidies in Agriculture after the Dairy, Cotton and Sugar Disputes", Geneva: UNCTAD, 2007, p. 2.

[126] UNCTAD *Handbook on Dispute Settlement,* Chapter 3.15 Agriculture, Geneva: United Nations Conference on Trade and Development, 2003, pp. 39-40.

[127] Ibid.

[128] Desta, M., "The Evolution of the WTO Agreement on agriculture from its Uruguay Round Origins to Its Post-Hong Kong Directions", May 2006, FAO Legal Office, p. 24, available at: http://www.fao.org/legal/prs-ol/lpo55%20.pdf

Part IV of the Member's Schedule.[129] Amber box measures are legitimate agricultural subsidies unless their total amount does not exceed the final bound commitment level specified in the Member's Schedule. However, the following forms of domestic support measures are available to all Members and exempted from the reduction commitments: (i) product-specific and non-product-specific domestic subsidies that do not exceed 5 percent (or 10 percent for developing country Members) of the Member's total value of production of a basic agricultural product during the relevant year and 5 percent (or 10 percent for developing country Members) of the value of the Member's total agricultural production respectively, so-called *de minimis* subsidies[130]; (ii) direct payments to agricultural producers under production-limiting programs, so-called 'blue box measures', provided that requirements of Article 6.5 of the AoA are observed; and (iii) domestic support measures that cause no or at most minimal trade- and production-distortive effects, so-called 'green box measures'[131], provided that criteria set out in paragraph 1 of Annex 2 to the AoA are observed.

Article 8 of the AoA requires WTO Members to provide export subsidies on agricultural products only in conformity with this Agreement and with their commitments reflected in the Part IV of the Member's schedule. Consequently, Members may only grant export subsidies (i) in respect of the agricultural products or group of products listed in their schedules of concessions within the limits of the budgetary outlay and quantity commitment levels specified therein;[132] (ii) in respect of agricultural products or group of products listed in their schedules of concessions in excess of the corresponding annual commitment levels, provided that criteria and conditions set out in Article 9:2(b) are observed; (iii) in respect of the agricultural products or group of products not listed in their schedules of concessions, provided that they do not circumvent export subsidy commitments. Therefore, other export subsidies on agricultural products that do not conform fully provisions of Part V of the AoA are prohibited by virtue of Article 3 of the ASCM.

Subsidization of services is not regulated by WTO law. Rules on subsidies and subsidized trade established by the ASCM, including the concept of a subsidy as

[129] O'Connor, B., "Subsidies in Agriculture after the Dairy, Cotton and Sugar Disputes", Geneva: UNCTAD, 2007, p. .3.

[130] The AoA, Article 6.4.

[131] Annex 2 to the AoA includes indicative list of domestic support measures and practices that can be exempted from reduction commitments of a WTO Member.

[132] Only those WTO Members (most of them developed countries) that had granted export subsidies on agricultural products during the base period (1986 – 1990) and listed them in their schedules of concessions were entitled to continue granting such subsidies, provided that they are subject to product-specific reduction commitments.

such, are applicable only to trade in goods. General Agreement on Trade in Services (GATS) annexed to the WTO Agreement does not provide any rules on subsidization in the services sectors as well as on offsetting its distortive effects. Instead, the GATS merely requires WTO Members to engage in negotiations of multilateral rules that would address the possible distortive effects of subsidies on trade in services[133], "exchange information concerning all subsidies related to trade in services that they provide to their domestic suppliers"[134] and "accord sympathetic consideration" to consultation requests of other Members that consider themselves "adversely affected by a subsidy".[135]

2.2. Relationship between trade and environment

At first sight it might appear that WTO law and climate change are not linked or at least, their relationship is unclear. Nonetheless, Members may rely upon certain provisions of WTO law while implementing measures related to the protection of the environment in general and to climate change in particular. International environmental law and the climate change regime could also significantly benefit from enhanced interaction with WTO law. Moreover, the concept of sustainable development implies that "the multilateral trading system and multilateral environmental agreements (MEAs) should be mutually supportive." [136] However, the mutual supportiveness of the two separate bodies of international law has not yet been completely ensured.

Recent economic growth and consequent trade expansion has brought both positive and negative results. Certainly, economic growth and trade promote development, poverty reduction, employment and even international peace and security, but they also have a downside – substantial pressure on the environment, overloaded production and unlimited consumption. Overexploitation of natural resources, increasing levels of pollution, production and consumption patterns based almost exclusively on fossil-fuels, deforestation, land degradation and other consequences are very often attributed to the effect of WTO rules that predominantly focus on phasing out and preventing the introduction of new barriers to trade. This

[133] GATS, Article XV:1. It should be noted that the negotiations have not brought any results yet.

[134] Ibid.

[135] Ibid, Article XV:2.

[136] Environment and Trade. A Handbook, 2nd Edition, United Nations Environment Programme, International Institute for Sustainable Development Published by the International Institute for Sustainable Development, 2005, p. 65.

action ultimately hinders application of adequate measures aimed at addressing environmental concerns. To certain extent this estimation is valid.

The WTO law evolved from GATT 1947 and was primarily aimed at ensuring economic and social development of its Contracting Parties, expanding production and trade and "developing the full use of the resources of the world" by means of " a substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international commerce."[137] Understandably, after the Second World War, environmental concerns were not the matter of top priority for GATT Contracting Parties. Consequently, trade policy responses related to protection of the environment were not adequately addressed in the GATT 1947. Article XX of GATT 1947 did not explicitly mention protection of the environment among the legitimate exceptions to the international obligations of Contracting Parties under this Agreement. However, two exceptions were implicitly relevant to this end. Article XX(b) and (g) authorized Contracting Parties to adopt and enforce measures "necessary to protect human, animal or plant life or health"[138] and "relating to the conservation of exhaustible natural resources…"[139], provided that such measures were not applied in a discriminatory manner and did not constitute "a disguised restriction on international trade."[140]

The Uruguay Round of multilateral trade negotiations resulted in the conclusion of the WTO Agreement that elaborated further objectives and rules of the GATT 1947. The Preamble to the WTO Agreement explicitly recognizes as one of the objectives of this Agreement "the expansion of the production of and trade in goods and services, while allowing the optimal use of the world's resources in accordance with the objective of sustainable development and seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with [Parties] respective needs and concerns at different levels of economic development."

Therefore, interpretation of the provisions of covered agreements should take into account environmental concerns and the objectives of sustainable development. Defining the scope of Article XX(g) of GATT 1994 the Appellate Body followed this approach by recognizing "the importance of concerted bilateral or multilateral action"

[137] Preamble to the GATT 1947.

[138] The GATT, Article XX(b).

[139] The GATT, Article XX(g).

[140] The GATT, chapeau of Article XX

on environmental protection and referring to "the explicit recognition by WTO Members of the objective of sustainable development in the preamble of the WTO Agreement."[141] In addition, some of the WTO covered Agreements (e.g. Agreement on Technical Barriers to Trade and Agreement on Application of Sanitary and Phytosanitary Measures) as well as WTO jurisprudence have elaborated and interpreted further GATT legal provisions related to environmental protection.

As noted above, the MEAs emerged as of the 1970s. There are "over 250 MEAs dealing with various environmental issues which are currently in force [. . . and only] about 20 of these include provisions that can affect trade."[142] Inclusion of trade-related provisions in the MEAs facilitates achievement of their objectives and enhances compliance and cooperation.[143] Some of the trade-related MEAs affect trade directly through explicit imposition of obligations on Parties that imply application of restrictions on trade and production either among Parties or between Parties and non-Parties or both.[144] Other MEAs do not impose explicit trade related obligations on Parties although their implementation may imply application of trade restrictions or other measures that affect trade.[145] In both cases there is a possibility of conflict between two separate bodies of international law. To resolve this conflict, WTO Members may take recourse to the WTO dispute settlement mechanism and challenge compliance of the trade-related environmental measure adopted by the other Member with the aim of implementation of its obligations under the MEA. The Appellate Body has interpreted WTO law in a broader context of public international law, in a mutually supportive manner and acknowledged the legitimacy of trade-related environmental measures aimed to address environmental issues outside the jurisdiction of a Member, provided that there is 'sufficient nexus' between the applied measure and environmental protection objective.[146] In spite of a tendency to interpret WTO law broadly, the agreement of Members with respect to the relationship

[141] The Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, dated 12 October 1998, paragraph 131.

[142] WTO Web site, visited 30.09.2011, http://www.wto.org/english/tratop_e/envir_e/envir_neg_mea_e.htm

[143] Environment and Trade. A Handbook, 2nd Edition, United Nations Environment Programme, International Institute for Sustainable Development Published by the International Institute for Sustainable Development, 2005, pp. 20-22.

[144] For example, the Montreal Protocol on Substances that Deplete Ozone Layer (Montreal Protocol) or Convention on International Trade of Endangered Species (CITES).

[145] For example, the UNFCCC and its Kyoto Protocol.

[146] Report of the Appellate Body, *United States - Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, adopted 20 May 1996, p. 17. Report of the Appellate Body, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, dated 12 October 1998, paragraphs 130-134.

between trade and environment would provide greater certainty and predictability to both the multilateral trading system and international environmental regimes established by the MEAs. The issue of relationship between the WTO law and MEAs is negotiated within the current Doha round of multilateral trade talks. However, a special session of the Trade and Environmental Committee has not achieved noticeable progress on this important issue.

3. Subsidies as an instrument of climate change mitigation policy

Subsidies may have great influence on climate change. So-called 'perverse subsidies' encourage carbon intensive methods of production and consumption, hinder investments in ecological technologies and renewable energy, foster overuse and misuse of resources and, thus, contribute to global warming and climate change.[147] On the other hand, subsidies are able to contribute to the climate change response by providing incentive to reduce GHG emissions, to promote energy efficiency, encourage production and consumption of renewable energy, foster sustainable agriculture, reforestation, recycling, etc.

Subsidies may (and should) be used in order to facilitate implementation of policies and measures listed in Article 2.1(a) of the Kyoto Protocol that explicitly requires Annex 1 Parties, in achieving their commitments under Article 3 and promoting sustainable development, (i) enhancing energy efficiency; (ii) protecting and enhancing sinks and reservoirs of GHGs; (iii) promoting sustainable forms of agriculture; (iv) researching, developing and deploying of environmentally sound technologies; (v) progressive reducing and phasing out of market imperfections, including perverse subsidies, in all GHG emitting sectors that run counter to the objective of the UNFCCC and application of market instruments; (vi) encouraging appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce GHG emissions; (vii) limiting and/or reducing GHG emissions; and (viii) limiting and/or reducing of methane emissions through recovery and use in waste management.

4. Analysis of possible outcomes of climate change negotiations and their interaction with the WTO law on subsidies and subsidized trade

The outcomes of recent climate change conferences and meetings do not inspire optimism over the possibility to conclude a new, comprehensive climate

[147] Myers, N., "Perverse Subsidies", Encyclopedia of Earth. Eds. Cutler J. Cleveland (Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment), August 9, 2007. Available at: http://www.eoearth.org/article/Perverse_subsidies.

change agreement, at least in the short term perspective. Parties to the UNFCCC and its Kyoto Protocol have not yet been able to make a breakthrough in talks and bridge the gap on the most important and controversial aspects of the future climate change regime. In addition, the uncertain performance of global and national economies that are balancing on the edge of a double-dip, substantially reduces chances to agree to ambitious, legally binding GHG emissions reduction targets applicable to all major emitters, including emerging economies, as implementation of such international commitments will inevitably affect emissions-intensive and trade-exposed industries.

Consequently, climate change negotiations will most likely result in conclusion of the interim agreement that will neither substantially advance the global climate change regime nor have significant impact on WTO law, including on subsidization and subsidized trade. The analysis of interaction between WTO law on subsidization and subsidized trade and the interim climate change agreement is based on the assumption that:

- only some Annex I Parties[148] will take new binding targets for cutting their GHG emissions during the second commitment period under the Kyoto Protocol;
- rest of Annex I Parties[149] will not extend their commitments under Kyoto Protocol and will declare non-binding pledges[150] to cut GHG emissions according to the unilaterally-set reduction targets for the post-Kyoto period that will be subject to the measurement, reporting and verification;
- the emerging economies that are also among major non-Annex I emitters will either declare their GHG emissions reduction pledges or avoid indicating any GHG emissions reduction targets that they have intention to reach over the defined timeframe;

[148] EU, Switzerland, Norway, Australia and some others.

[149] US did not ratify the Kyoto Protocol. Japan, Canada and Russia declared recently their intentions not to take new GHG emission reduction targets for the post-Kyoto period. Source: Reuters, "Canada confirmed on Wednesday that it would not support an extended Kyoto Protocol after 2012, joining Japan and Russia in rejecting a new round of the climate emissions pact", BONN, Germany, June 9, 2011, 2:47pm EDT, http://www.reuters.com/article/2011/06/09/us-climate-canada-idUSTRE75755O20110609.

[150] I.e. voluntary, unilateral undertaking by a country to limit or reduce its GHG emission over certain period of time, implementation of which is expected to be subject to international measurement, reporting and verification.

- other non-Annex I Parties will only reaffirm their minimal commitments under the UNFCCC and Kyoto Protocol that does not imply any quantified GHG emissions reductions;
- flexibility mechanisms established by the Kyoto Protocol as well as mechanisms envisaged by Copenhagen Accord and Cancun Agreements in the area of financial support, technology transfer and capacity building will be reflected in the interim agreement;
- trade measures related to the implementation of reduction commitments and pledges will not be addressed or clarified.

Acknowledging that all Parties would be better off in the long term if a comprehensive climate change deal could be reached, the international talks over the future climate change regime will continue. The new climate change agreement must be universal and comprehensive in terms of participation and coverage.[151] Moreover, it could also reinforce stability, legal certainty and predictability of the multilateral trading system provided that its provisions, *inter alia*:

- ensure universal participation, including the possibility to apply trade measures to non-Parties in order to induce their participation in a global endeavor to address climate change;
- establish legally binding commitments for Annex I Parties to limit and reduce their emissions and enhance GHG removals by sinks;
- envisage contribution of all non-Annex I Parties in the form of emissions reduction pledges and GHG removals by sinks commitments, provided that the pledges of major GHG emitters not included in Annex I and GHG removal commitments of all parties are subject to international measurement, reporting and verification;
- exempt LDCs from emissions reduction pledges, provided that they commit to limit their future GHG emissions at reasonable levels that shall not be exceeded;
- allow certain level of flexibility for non-Annex I Parties according to the principle of common but differentiated responsibility (e.g., lower level of limitation and/or reduction targets, longer implementation period,

[151] The new, comprehensive climate change agreement has to reflect on the relationship between global climate change regime and multilateral trading system as well as address issues that remain uncertain under the current WTO law in order to avoid complications related to the implementation of climate change policies.

link implementation of pledges with the commitments of the developed Parties to provide financial, technological and technical assistance);

- reinforce operation of flexibility mechanisms established by the Kyoto Protocol as well as mechanisms envisaged by Copenhagen Accord and Cancun Agreements in the area of financial support, technology transfer and capacity building;
- strengthen transparency and information exchange provisions;
- establish an explicit relationship with the multilateral trading system requiring implementation and interpretation of provisions of the climate change agreement and the WTO Agreement in mutually supportive manner;
- authorize the application of trade-related measures in order to facilitate the objectives of the climate change agreement provided that their application does not pursue protectionist objectives and constitute disguised restriction of trade as well to ensure compliance with this agreement;
- provide principles, rules and guidelines for implementation and operation of measures, schemes and mechanisms that induce emissions reductions (e.g. emissions trading schemes).

Any of the above outcomes of climate change negotiations will have certain implications on trade and industrial policies because Parties to the UNFCCC and its Kyoto Protocol will take recourse to trade-related measures implementing their emissions reduction commitments and pledges. Subsidies are able to facilitate implementation of climate change mitigation and adaptation policy measures. However, the following issues and measures related to the climate change policy implementation are controversial and disputable in the context of the WTO law in general and multilateral rules on subsidies and subsidized trade in particular: non-participation in global efforts to mitigate climate change or non-compliance with reduction commitments or pledges; offsetting the losses of competitiveness of the industry as a result of climate change policy implementation (free allocation of GHG emissions allowances in order to offset carbon leakage and loss of market shares); tax incentives and regulatory measures associated with the promotion of production and consumption of renewable energy; subsidies for enhancing energy efficiency and contingent upon use of domestic over imported products. These and other issues and measures related to climate change policy implementation must be addressed

either in the new, comprehensive climate change agreement or through interpretation of the WTO law and climate change agreements by the WTO Membership or by the WTO jurisprudence.

4.1. Interaction between the WTO law on subsidization and subsidized trade and the interim climate change agreement: some issues of implementation of certain climate change measures

Parties to the UNFCCC and its Kyoto Protocol may implement their emissions reduction commitments and pledges domestically through, *inter alia*, (i) so-called carbon tax, i.e. taxation of each unit of GHG emissions or the carbon content of fuels, (ii) operation of so-called 'emissions trading scheme',[152] and (iii) protection of carbon sinks and enhancement of carbon sequestration. The interim climate change agreement will not require using any particular method of implementation of emissions reduction commitments. Parties will be free to decide how to cut their emissions domestically.

Usually governments supplement regulatory measures that induce industrial emitters to cut their emissions with subsidization that directly targets certain aspects of their climate-harmful and unsustainable business practice. For instance, through subsidization, governments target specific issues that contribute to emissions reduction, e.g. promotion of energy efficiency, production and consumption of renewable energy and others.

Subsidies provided for cutting emissions may distort trade or cause adverse effects to the interests of WTO Members. In such situations the WTO law on subsidization and subsidized trade steps in and disciplines such subsidies regardless of their relation to the domestic climate change policy. Are multilateral rules on subsidization and subsidized trade capable of addressing adequately different situations that may arise in the process of domestic climate change policy implementation? The impact of WTO law on subsidization and subsidized trade regarding implementation of certain measures related to climate change policy is analyzed below.

[152] Emissions trading schemes implies allocation of individual quotas on GHG emissions among covered industrial emitters in the form of annual allowances or permits. A covered industrial emitter is not allowed to exceed assigned limit unless it purchases additional allowances. Allowances holders may sell some allowances to those emitters that need to emit over assigned limits.

4.1.1. WTO law on subsidization and subsidized trade and distribution of emissions allowances free of charge under emissions trading schemes

Some Parties to the UNFCCC and its Kyoto Protocol[153] implement emissions trading schemes, also known as 'cap-and-trade systems', in order to promote emissions reduction. These systems allow a softening of the impact of emissions reduction on the domestic economy. The idea of an emissions trading scheme is to employ market forces to cut emissions. A government, by means of regulation, limits the total amount of emissions and allocates allowances among covered industrial emitters. The distributed individual allowances do not exceed the total amount of emissions set according to the international reduction commitment or pledge targets. It also establishes a special market where allowances can be traded. The price of GHG emissions should be determined by supply and demand for emissions allowances. Emissions trading should provide covered industrial emitters with economic incentive to cut their emissions. However, concerns over losses in competitiveness, especially emissions-intensive and trade-exposed industries, and subsequent carbon leakage, result in political pressure on governments to offset lack of climate change actions in developing countries by distributing emissions allowances free of charge. Such governmental intervention may distort operation of the GHG emissions market, reduce the incentive to cut emissions, affect trade and cause adverse effects on the interests of WTO Members. Is the WTO law on subsidization and subsidized trade able to discipline the practice of free allocation of emissions allowances?

The free allocation of allowances by a government among covered industrial emitters has to be a subsidy within the meaning of Article 1 of the ASCM in order to activate provisions to this Agreement. The GHG emissions allowance is an asset that entitles its holders to the right to access, use[154] or exchange[155] a common resource, i.e. atmosphere or clean air. This asset is usable and tradable[156]. Consequently, it has certain value for its holder.[157] Therefore, a GHG emissions allowance could be considered as either securities[158] or goods[159].

---

[153] I.e. EU and New Zeland.

[154] By emitting certain amount of GHGs over the defined timeframe.

[155] By transferring this entitlement to other covered industrial emitters for a fee or otherwise.

[156] Provided that GHG emissions market has emerged.

[157] Howse, R., "Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis", the International Institute for Sustainable Development, May 2010, p. 12.

[158] Or, at least, a tradable financial asset that has the characteristics and properties attributable to a security.

The distribution of GHG emissions allowances free of charge may fit in one of the types of governmental financial contribution within the meaning of Article 1.1(a)(1) of the ASCM.

Firstly, distribution of emissions allowances among covered industrial emitters free of charge may be considered as 'a governmental practice that involves a direct transfer of funds'. Accordingly, by distributing allowances free of charge a government directly transfers funds in the form of securities to covered industrial emitters. Upon receiving the allowance, covered industrial emitters may sell them on the GHG emissions market and obtain financial resources or, ultimately, they may use free allowances for their primary purpose by discharging the assigned quantity of GHGs into the atmosphere. Consequently, they do not have to buy allowances from the government or from other private holders. A similar effect would occur if government distributed bonds free of charge among certain enterprises. Therefore, in both cases free allocation of emissions allowances constitute a direct transfer of funds from the government within the meaning of Article 1.1(a)(1)(i) of the ASCM.

Secondly, free distribution of GHG emissions allowances may also be considered as 'forgone or not collected governmental revenue that is otherwise due', especially, if there is "defined, normative benchmark against which a comparison can be made between the revenue actually raised and the revenue that would have been raised 'otherwise'."[160] However, a financial contribution by a government within the meaning of Article 1.1(a)(1)(ii) of the ASCM could hardly be established unless the climate change agreement to which a WTO Member is a Party or domestic legislation of that WTO Member requires to distribute all or, at least, some of the allowances by virtue of auctioning or selling at a fixed price. Therefore, determination of this type of financial contribution depends upon international or domestic regulation of the method for emissions allowances allocation.

Thirdly, free distribution of allowances may also be considered as a governmental provision of goods other than general infrastructure. The Appellate Body concluded in the *US – Softwood Lumber IV* case that the term 'goods' has the

---

[159] In Report of the Appellate Body, *United States – Final Countervailing Duty Determination With Respect to Certain Softwood Lumber from Canada*, WT/DS257/AB/R, dated 17 February 2004, paragraph 75, the Appellate Body found that the rights to access, to use or to exchange a good granted by a government to a private entity constitute a form of provision of a good within the meaning of Article 1.1(a)(1)(iii).

[160] Report of the Appellate Body, *United States - Tax Treatment For "Foreign Sales Corporations"*, WT/DS108/AB/R, dated 20 March 2000, paragraph 90.

broad meaning in the context of Article 1.1(a)(1)(iii) of the ASCM.[161] Consequently, atmosphere or clean air, being a common resource, may be considered as 'a goods other than infrastructure[162]' in the context of above mentioned provision of the ASCM. The Appellate Body in the same decision ruled that by granting the right to access and/or use the good, a government provides that good to the right holder. As was noted above, a holder of the allowances receives regulated access to a public good and may either discharge the assigned quantity of GHGs into the atmosphere or transfer this right to consume clean air to another covered industrial emitter. Therefore, by distributing emissions allowances to covered industrial emitters free of charge, government provides goods other than general infrastructure within the meaning of Article 1.1(a)(1)(iii) of the ASCM.

Finally, a subsidy in the form of income support 'which operates directly or indirectly to increase exports of any product from, or to reduce imports of any product into its territory' may exist in case of over-allocation of emissions allowances free of charge provided that the alleged over-distribution confers a benefit to covered industrial emitters and distorts trade. Although, provision of Article XVI of GATT originally was deemed to address the trade-distortive effect of income or price support measures in agricultural and commodities sectors, its relatively broad and open-ended language might be interpreted in a way that make this provision applicable to measures of governmental support in other sectors as well.[163]

According to Article 1.1 of the ASCM a subsidy is deemed to exist if governmental financial contribution or any form of income or price support in the sense of Article XVI of GATT 1994 confers a benefit on a recipient. Otherwise, a subsidy does not exist within the meaning of the Article 1 of the ASCM.

Free distribution of the GHG emissions allowances confers a benefit on covered industrial emitters because they are better off than they otherwise would have been, absent such allocation of allowances.[164] Free distribution of allowances

---

[161] Report of the Appellate Body, *United States – Final Countervailing Duty Determination With Respect to Certain Softwood Lumber from Canada*, WT/DS257/AB/R, dated 17 February 2004, paragraphs 56-67.

[162] The term 'general infrastructure' refers to another type of goods – public goods. Thus, Article 1.1(a)(1)(iii) implies that governmental provision of other types of goods, including common resources, constitutes a type of financial contribution.

[163] Jegou, I., Rubini, L., *The Allocation of Emission Allowances Free of Charge: Legal and Economic Considerations*; ICTSD Programme on Competitiveness and Sustainable Development; Transition to a Low Carbon Future Series; Issue Paper No.18; International Centre for Trade and Sustainable Development, Geneva, Switzerland, www.ictsd.org.

[164] Report of the Appellate Body, *Canada - Measures Affecting the Export of Civilian Aircraft,* WT/DS70/AB/R, dated 20 August 1999, paragraphs 157-158.

provides to eligible recipients an advantage[165] as they do not pay for unsustainable industrial practice and, in some cases, even may improve their financial position by selling allowances on the GHG emissions market[166]. The notion that some subsidies "may actually offset other disadvantages and serve as useful corrective measures"[167] of governmental policy is a worthy one but not in the climate change context because free allocation of allowances is inconsistent with the principle of a polluter's liability for environmentally-harmful activity. Therefore, the existence of a benefit conferred upon the industrial emitters as a result of free allocation of allowances can be demonstrated.

The WTO case law on subsidization and subsidized trade has used the marketplace, private investor's motivation or the total cost of production as the benchmarks to determine the amount of a benefit to the recipient.[168] In most cases the benefit conferred on the recipient by the financial contribution in the form of forgone or not collected governmental revenue that is otherwise due is quite straightforward.[169] Although, it will be quite complicated in the case of free allocation of allowances considered as forgone or not collected governmental revenue, especially, if there is no a benchmark price of such allowances set out either by the previous auctions or by the domestic or other relevant GHG emissions market[170]. The domestic GHG emissions market[171] or the compared market in another WTO Member[172] may be also used as a benchmark for calculation of the amount of a benefit resulting from the free distribution of allowances considered as the governmental financial contribution in the form of direct transfer of funds or governmental provision of goods other than general infrastructure. However, such calculations are complicated because GHG emissions markets are currently emerging and substantially distorted by the governmental interventions. Therefore,

[165] Provided that the cap-and-trade system is mandatory for covered industrial emitters and emissions have certain price.

[166] Provided that the GHG emissions market has emerged.

[167] Sykes, A., O., "The questionable case for subsidies regulation: A comparative perspective", Paper presented at the Yale Leitner Center WTO Conference, April 3, 2009, p. 23.

[168] Mavroidis, P.C., Messerlin, P. A., Wauters, J. M., *The Law and Economics of Contingent Protection in the WTO*, Edward Elgar Publishing, 2008, pp. 324-325.

[169] Report of the Panel, *Canada - Certain Measures Affecting the Automotive Industry,* WT/DS139,142/R, dated 19 June 2000, paragraph 10.165.

[170] The price of the emissions allowances defined by the GHG emissions market may indicate the amount of forgone or not collected governmental revenue otherwise due even if the government auctioned them among covered industrial emitters.

[171] Provided that the GHG emissions market has emerged.

[172] Provided that the GHG emissions market has not emerged or cannot provide an appropriate benchmark for comparison.

determination of the existence of a benefit conferred as a result of free allocation of emissions allowances as well as calculation of its amount depend on GHG emissions market conditions and availability of clear and comprehensive international and/or domestic climate change rules that regulate operation of emissions trading schemes.

The ASCM could discipline a subsidy in the form of free allocation of allowances if it is specific, i.e. access to a subsidy is limited, in law or in fact, to 'certain enterprises'. It means that allocation of allowances free of charge is not "sufficiently broadly available throughout the economy as not to benefit a particular limited group of producers of certain products."[173] Determination of the specificity of a subsidy requires comprehensive analysis of all aspects and factors related to the actual availability, eligibility and usability of a subsidy by a certain enterprises. Rather strict rules of Article 2 of the ASCM, especially regarding subsidies specific in fact, export and import substitution subsidies, allows finding free allocation of allowances as specific subsidy because, more than likely, emissions-extensive and trade-exposed industries will be predominant users of free allowances or absorb disproportionately large amount of them.

Therefore, distribution of emissions allowances free of charge among covered industrial emitters will be found as a specific subsidy within the meaning of Articles 1 and 2 of the ASCM. Consequently, free distribution of allowances could be prohibited or actionable[174] provided that this method of allowances allocation distorts trade or adversely effects interests of other WTO Members respectively.

4.1.2. WTO law on subsidization and subsidized trade and subsidies to production and consumption of renewable energy

Subsidization of production and consumption of renewable energy pursues a very important public policy objective. Renewable energy may substantially promote sustainable development as it addresses two important issues – climate change mitigation (by reducing GHG emissions) and energy security (by reducing dependence of a society from fossil-fuels).

The governmental assistance of renewable energy production and consumption may be provided directly (subsidies to renewable energy producers) or indirectly (subsidies to renewable energy consumers). Direct and indirect

[173] Report of the Panel, *United States – Subsidies on Upland Cotton*, WT/DS267/R, dated 25 March 2005, paragraph 7.1142.

[174] In case of material injury or threat of injury to domestic industry specific subsidy may be either actionable or countervailable.

governmental support of renewable energy may involve any types of financial contribution. However, various tax incentives and regulatory measures that require certain purchasing behavior from the participants of the energy market may substantially confound the application of the ASCM.[175] In both cases to demonstrate the existence of a subsidy is quite difficult.

The major problem with tax incentives aimed at promotion of production and consumption of renewable energy is to determine whether the forgone or uncollected governmental revenue is otherwise due.[176] This requires a comparison of the particular tax incentive with a "defined, normative benchmark", i.e. the appropriate general tax rule, in order to decide whether it constitutes a deviation from the general rule rather than establishes the general rule by itself.[177] However, it is very difficult to identify such a normative benchmark, because of the specificity of the tax legislation that very often is incoherent, fragmented and unstable.[178] Therefore, determination of whether a particular tax incentive constitutes a financial contribution within the meaning of Article 1.1(a)(1)(ii) is a challenging exercise with uncertain results.[179]

Regulation of the energy market is another commonly used alternative to support production and consumption of renewable energy. The government measures that regulate operation of energy market cannot be recognized as a subsidy within the meaning of Article 1 of the ASCM unless they "entrust or direct a private body to carry out . . . functions . . . which would normally be vested in the government and the practice . . . [does not] differ from practice normally followed by governments".[180] The important clarification that functions entrusted or ordered to be carried out by a non-governmental agent must normally be assigned to a government and the practice of their implementation must correspond to the practice normally followed by governments provides useful guidance that allows for the distinguishing of measures related to public administration from regulatory subsidies. However, if a regulatory measure establishes a mechanism of price support which directly or

[175] Rubini, L., "The Subsidization of Renewable Energy in the WTO: Issues and Perspectives", Swiss National Center for Competence in Research, NCRR Trade Working Paper No 2011/32, June 2011 p. 11.

[176] Ibid.

[177] Report of the Appellate Body, *United States - Tax Treatment for "Foreign Sales Corporations"* (Recourse to Article 21.5 of the DSU by the European Communities), WT/DS108/AB/R, dated 29 January 2002, paragraphs 88-92.

[178] Rubini, L., "The Subsidization of Renewable Energy in the WTO: Issues and Perspectives", Swiss National Center for Competence in Research, NCRR Trade Working Paper No 2011/32, June 2011 p. 11.

[179] Ibid, pp. 19-20.

[180] The ASCM, Article 1.1(a)(1)(iv).

indirectly has an effect on trade rather than a system of price regulation, it might be interpreted as a subsidy within the meaning of the Article 1.1(a)(2) of GATT 1994. Therefore, the legal status of governmental regulatory measures has to be clarified further.

Determination of the benefit conferred on the producers or consumers of renewable energy as a result of tax incentives depends on the assessment of whether forgone or not collected governmental revenue is otherwise due. The tax incentive does not confer benefit upon the producers or consumers of renewable energy unless the deviation of such tax incentive from the general tax rule is established. In the case of an established deviation, the amount of the benefit corresponds to the amount of forgone or not collected governmental revenue that is otherwise due. If the government is acting on the energy market, the marketplace benchmark is applied for determination of the existence of a benefit as well as for calculation of its amount.[181] However, the results of such assessment are not reliable and definitive because energy markets have been significantly distorted by various governmental interventions. Therefore, the alternative benchmark, i.e. the total cost of production, could be used in order to determine the existence and the amount of the benefit conferred on producers or consumers of renewable energy as a result of governmental action on the energy market.

Specificity is the final element that must be demonstrated in order to tag a subsidy as 'actionable' and activate the rules of the ASCM. A subsidy for production or consumption of renewable energy is specific unless it is "sufficiently broadly available throughout the economy as not to benefit a particular limited group of producers of certain products."[182] However, it seems that subsidies for production or consumption of renewable energy ultimately benefit 'certain enterprises', i.e. producers of renewable energy. And even 'concurrent application'[183] of all principles set out in Article 2.1 of the ASCM makes it difficult to offset *de facto* specificity of subsidies for production or consumption of renewable energy. Therefore, a concept of specificity and its interpretation in WTO jurisprudence almost certainly picks up any subsidy for production or consumption of renewable energy and puts it in the

[181] Rubini, L., "The Subsidization of Renewable Energy in the WTO: Issues and Perspectives", Swiss National Center for Competence in Research, NCRR Trade Working Paper No 2011/32, June 2011 p. 24.

[182] Report of the Panel, *United States – Subsidies on Upland Cotton*, WT/DS267/R, dated 25 March 2005, paragraph 7.1142.

[183] Report of the Appellate Body, *United States – Definitive Anti-Dumping and Countervailing Duties on Certain Products from China,* WT/DS379/AB/R, dated 11 March 2011, paragraph 371.

actionable basket. Although, unilateral or multilateral actions against specific subsidy may only be taken if it distorts trade or causes adverse effects to the interests of other WTO Members, nonetheless, the concept of specificity might affect the efficiency of allocation of scarce resources as, in most cases, climate change response requires targeted actions in order to insure maximum results.

4.1.3. WTO law on subsidization and subsidized trade and subsidies to promote energy efficiency

Effective implementation of GHG emissions reduction commitments by internalizing costs of emissions encourages consumers of energy (both industrial and household) to invest in energy efficient modes of consumption and energy saving technologies. However, many WTO Members additionally stipulate energy efficiency through subsidization. The governmental support of this objective may be delivered in various forms, including those listed in Article 1.1 of the ASCM. Grants, loans, loans guarantees, tax incentives, governmental purchases, provisions of goods and services confer benefit on enterprises and industries. Energy efficiency programs could be designed and implemented in a non-specific manner in order to be "sufficiently broadly available throughout the economy as not to benefit a particular limited group of producers of certain products."[184] However, the possibility to allocate substantial public funds in order to promote energy efficiency of the most emissions-intensive sectors could ensure better outcomes of the climate change response.

One potential problem related to the implementation of subsidy programs on energy efficiency enhancement may arise when such subsidies, whether in law or in fact, are contingent upon the use of domestic over imported goods. Provision of subsidies enhancing energy efficiency may ensure achievement of another industrial policy objective – establishment of domestic industries producing energy-efficient products or promotion of competitiveness of existing enterprises on domestic and export markets. For instance, a subsidy eligibility requirement to purchase only those energy-efficient products, the characteristics of which comply with either domestic or regional energy efficiency standards,[185] as one of the conditions, may transform energy efficiency subsidy into an import substitution one.[186] Export and import substitution subsidies are prohibited by the ASCM and deemed to be specific

[184] Ibid.

[185] Adoption of international standards or guidelines on products' energy efficiency is able to resolve this problem.

[186] Howse, R., "Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis", the International Institute for Sustainable Development, May 2010, p. 16.

regardless of their broad availability throughout the economy. Therefore, the WTO law on subsidization and subsidized trade seems to adequately discipline subsidies related to implementation of climate change measures that target emissions reduction through enhancement of energy efficiency.

4.2. Interaction between the WTO law on subsidies and subsidized trade and the new, comprehensive climate change agreement

Broad participation and a high level of compliance with a treaty's commitments are the key elements of effective international cooperation. The new, comprehensive climate change agreement will be able to ensure the achievement of the ultimate objective of the UNFCCC if all countries contribute to the global climate change efforts and Parties to this agreement respect their commitments and pledges. Is the WTO law on subsidization and subsidized trade able to contribute to the achievement of the objectives of the global climate change regime by promoting broader participation in the new, comprehensive climate change agreement and enhancing compliance with Parties' commitments and pledges?

4.2.1. Inducement for participation in the new, comprehensive climate change agreement and the WTO law on subsidization and subsidized trade

We assume that the new, comprehensive climate change agreement will be universal and all Parties to the UNFCCC will become Parties to this agreement. However, if this assumption is not the case, a broad participation in the new, and comprehensive climate change agreement could be induced by trade and non-trade measures.

Non-trade measures that will induce participation in the new agreement include mechanisms envisaged by the Copenhagen Accord and Cancun Agreements that offer financial support, technology transfer and assistance in capacity building as well as flexibility provisions available for non-Annex I Parties according to the principle of common but differentiated responsibility. Usually, non-trade measures help to induce participation of developing countries and LDCs.

If Parties find it necessary, the agreement may include provisions that induce participation by explicitly authorizing Parties to apply trade measures against products imported from a non-Party, provided that it does not make appropriate efforts to cut its GHG emissions and the trade restrictive measures do not constitute arbitrary or unjustifiable discrimination between countries where the same conditions

prevail, or disguised restriction on international trade. Tax adjustments seem to be the most appropriate, although disputable, instruments to pursue this goal.[187]

The WTO law on subsidization and subsidized trade is not able to induce participation in the new, comprehensive climate change agreement. The CVD could hardly be applied in order to discourage climate change free-riding because within the meaning of Article 1 of the ASCM, failure of a WTO Member to introduce special regulation or tax to offset environmentally unsustainable business practice does not constitute a subsidy.[188] This Article provides that a subsidy exists when there is a financial contribution by a government (i.e. governmental transfer of any resources) or any form of income or price support that confers a benefit on the recipient. The decision of a government not to participate in the international treaty does not fit into three types of financial contributions referred to in Article 1.1(a)(1) of the ASCM and does not constitute a form of income or price support in the sense of Article XVI of GATT 1994 referred to in Article 1.1(a)(2). Consequently, a lack of international cooperation cannot be deemed a subsidy regardless that it makes producers of carbon-intensive products better off because they do not bear additional costs related to the GHG emissions reduction. Therefore, participation in global efforts to address climate change cannot be induced by application of countervailing duties because this situation does not fall under the scope of the ASCM.

4.2.2. Promotion of compliance with the new, comprehensive climate change agreement and the WTO law on subsidization and subsidized trade

Compliance with international commitments is another essential element that ensures achievement of an international treaty's objectives and promotes its effective operation. In the international plane, and especially in the environmental field, coercion is a less effective means of securing compliance than cooperation. Consequently, most MEAs do not imply application of economic sanctions for non-compliance or dispute settlement resolution[189] that induce or enforce compliance of

[187] Nonetheless, the application of the boarder tax adjustments in order to induce participation in global efforts to address climate change could be challenged within the WTO. Although, from the practical point of view, the government of the climate change free-rider may prefer joining the global efforts to address climate change rather than try to challenge the flood of cases on application of boarder tax adjustment to its export.

[188] However, from the economic point of view the inability of a government to internalize negative externality has the effect of a subsidy as the social costs of pollution are excluded from the total costs of a product.

[189] However, The Vienna Convention for Protection of the Stratosphere, and the Montreal Protocol on Substances that Deplete the Stratospheric Ozone Layer provide for application of trade-restrictive measures in order to induce participation and compliance with Parties' commitments. The Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and

Parties with their commitments under these Agreements. Even if an MEA provides for dispute resolution, Parties are reluctant to use this avenue. The incentive to engage in dispute settlement in case of non-compliance with commitments under the MEA which has global implications is low because usually such non-compliance 'impairs global commons' rather than directly affects interests of a particular Party, which is the case in the multilateral trading system.[190] Therefore, MEAs give preference to 'carrots' rather than 'sticks'. They employ technical assistance and capacity building technological support as compliance inducing instruments.

Most of the trade-restrictive measures (tariffs, non-tariff barriers) are able to induce compliance by coercing the non-complying Party to reconsider its behavior. Thus, in this capacity these measures have an effect similar to economic sanctions. However, the ultimate efficiency of this method of compliance inducement is disputable because it may not succeed in persuading a Party to comply and could even reduce the level of cooperation and affect trade.

Subsidies are able to promote rather than induce[191] compliance with Parties' commitments and pledges under the new, comprehensive climate change agreement by providing economic operators with the incentive to cut their emissions. To ensure compliance with international reduction commitments and pledges, Parties to the new, comprehensive climate change agreement will have to reconsider and adjust their subsidization programs with a view to optimizing and increasing efficiency of the public funds expenditures (e.g. phasing out perverse subsidies, increasing subsidization of projects that facilitate implementation of Parties' commitments and pledges). Such reform of subsidization policy will also provide strong incentive for the private sector to increase investments in projects that seek reduction of GHG emissions. Therefore, the new, comprehensive climate change agreement shall explicitly refer to subsidies as trade measures that Parties may use in order to implement climate change mitigation policy domestically, provided that they do not unnecessarily distort or restrict trade.

Pesticides in International Trade established dispute settlement mechanism for purpose of compliance inducement.

[190] Environment and Trade. A Handbook, 2nd Edition, United Nations Environment Programme, International Institute for Sustainable Development Published by the International Institute for Sustainable Development, 2005, p. 19.

[191] To induce compliance through imposing of CVDs on import of products from a non-complying Party is hardly possible because failure to implement international commitment does not constitute a subsidy within the meaning of Article 1 of the ASCM. However, failure of a Party to the climate change agreement to enforce emissions reduction measures established by domestic legislation and explicitly required by this agreement may be clarified as an actionable subsidy and countervailed.

4.2.3. Establishment of coherence between implementation of climate change mitigation measures and the WTO on subsidization and subsidized trade

The Parties to the UNFCCC and its Kyoto Protocol should strive to ensure coherency and synergy between the new, comprehensive climate change agreement and multilateral trading system in general and rules on subsidies and subsidized trade in particular in order to achieve the ultimate objective of the UNFCCC. There are a few particular areas that need to be addressed in the new climate change agreement.

Firstly, the new climate change agreement should establish a direct link with the multilateral trading system by explicitly recognizing mutual supportiveness with a view to ensuring sustainable development. Establishment of this relationship will provide useful guidance to the WTO dispute settlement system in the case of conflicts between two bodies of international law and enhance mutually supportive implementation of trade and climate change mitigation measures.[192] However, in case of manifest conflict between provisions of the new, climate change agreement and the ASCM, the multilateral trade rules will prevail unless WTO Members specifically address this situation within WTO law.

Secondly, the new, comprehensive climate change agreement should explicitly identify and monitor subsidies related to implementation of policies and measures listed in Article 2.1(a) of the Kyoto Protocol that might help mitigate climate change and promote sustainable development, provided that such subsidy does not distort or unreasonably restrict trade.[193] This would be helpful when a WTO Member invokes Article XX(b) and (g) of GATT 1994 to justify a subsidization program that contributes to emissions reduction.

Thirdly, the new, comprehensive climate change agreement should establish principles and rules according to which main emissions reductions schemes and mechanisms operate. For example, the new climate change agreement will set out guiding principles and rules for designing and operating emissions trading schemes, including, *inter alia*, criteria for participation, eligible industrial emitters, methods of allowances distribution (by virtue of auctioning or at regulated price), free allocation of allowances as limited exception, etc. It will promote harmonization of domestic

[192] Environment and Trade. A Handbook, 2nd Edition, United Nations Environment Programme, International Institute for Sustainable Development Published by the International Institute for Sustainable Development, 2005, p. 68.

[193] Howse, R., "Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis", the International Institute for Sustainable Development, May 2010, p. 24.

emissions reduction systems and contribute to greater legal certainty, transparency and predictability of both the climate change regime and the multilateral trading system.

Fourthly, the global climate change response will be of substantial benefit if the new, comprehensive climate change agreement could discipline (e.g. prohibit, phase out or limit) the provision of perverse subsidies in general or, at least, those subsidies that are especially climate-harmful and contributive to GHG stocks in the atmosphere (e.g. fossil-fuel subsidies), while emphasizing that these subsidies are in contradiction with the object and purpose of the Agreement. However, a commitment to prohibition or gradual elimination of perverse subsidies within the climate change agreement will not have implications on WTO law. It may even guide the future evolution of multilateral rules on subsidization and subsidized trade.

Lastly, the legal review of WTO law on subsidization and subsidized trade and its consequent reform could be mentioned as another alternative for the establishment of coherence between implementation of climate change mitigation measures and multilateral rules that discipline provision of subsidies. However, this is an unlikely endeavor that should seek to achieve a greater level of coherence with the global climate change regime and ultimately to improve the multilateral rules on subsidization and subsidized trade.

4.3. What shall be done for effective implementation of trade related measures designed to mitigate climate change?

Effective implementation of climate change policy based on the international climate change agreement will inevitably require application of trade-related measures. These measures are able to create new opportunities for trade as well as impose certain constraints on trade or affect trade interests of WTO Members. The international climate change agreement and multilateral trading system could benefit from enhanced coherence, mutual supportiveness and synergy which would be best achieved through negotiation and consensus building in the broader context of sustainable development. Indeed, it is very difficult to achieve consensus when negotiating such a complex and sensitive global issue as climate change and trade. Consensus is a product of mutual concessions based on the shared concerns and common but, perhaps, differentiated responsibility. Consensus-based rules ensure a greater level of stability, predictability and legal certainty of both the multilateral trading system and global climate change regime.

The global climate change response must be strengthened by a coherent and mutually supportive application of multilateral trade rules, including rules on subsidization and subsidized trade. Therefore, negotiations and litigation are two tracks available to WTO Members in order to tune WTO rules with the aim of effective implementation of climate change measures related to trade and preserving WTO Members rights and legitimate expectations. However, the negotiation track is preferable as it ensures more sustainable and predictable outcomes.

4.3.1. Negotiation-based adjustment of multilateral trade rules: amendments, authoritative interpretations and waivers

Adjustment of WTO law, including multilateral rules on subsidization and subsidized trade is the most difficult and at the same time the best way to ensure coherence and synergy between the global climate change regime and the multilateral trading system, reinforce its security, predictability and legal certainty. A negotiations-based approach to adjustment of both international regimes may imply negotiation of a new set of multilateral trading rules that progressively develop the WTO law by codifying a more than sixty decades-long practice of trade governance and the GATT/WTO jurisprudence, or targeted amendments of some provisions that give rise to legal uncertainty and need to be clarified or changed.

The climate change regime and multilateral trading system have many overlapping issues that need to be addressed should WTO Members decide to follow the negotiations-based path. Amending extremely complex and carefully balanced legal systems such as the WTO law implies enormous efforts and cautiousness. Sometimes it is even easier to establish a new system than try to adjust the existing one. Amendment of WTO law requires consensus of all Members, i.e. no Member shall object it. Taking into account that the current multilateral trade and climate change talks came to an impasse, the possibility to ensure convergence, coherence and mutual supportiveness of the multilateral trade and climate regimes by trying to amend the current legal texts is uncertain if at all possible. Something extraordinary would have to happen in order to make this approach viable.

The negotiations-based approach might succeed in the adoption of plurilateral agreement on the application of trade-related climate measures (including regulation

of climate-related subsidies) under Annex 4 of the WTO agreement.[194] Such plurilateral agreement may be negotiated and concluded among group of WTO Members that share concerns regarding climate change threat and are ready to contribute to its effective mitigation. The rules of such a plurilateral agreement will be binding to its Parties and enforceable in WTO dispute settlement.[195] A plurilateral agreement "do[es] not create either obligations or rights for Members that have not accepted them."[196] It could be open to other WTO Members that agree to bind themselves with its provisions later on. Despite the requirement that plurilateral agreements must be adopted by consensus[197] its inclusion into the WTO system is quite feasible because climate change is an urgent and important challenge. Members not wanting to be bound by the agreement could hardly explicitly object to its adoption. A separate plurilateral agreement concluded by a group of WTO Members outside the WTO, e.g. within the UNFCCC framework or even completely independently, could be another alternative. In this case the agreement could not use the WTO dispute settlement mechanism. The climate change mitigation efforts could be substantially advanced if all major GHG emitters joined the plurilateral agreement on application of trade-related climate measures regardless of whether under auspices of the WTO, UNFCCC or independently.

A negotiations-based possibility to bring WTO rules closer to the objectives of the climate change regime is an interpretation of the WTO Agreement and of the Multilateral Trade Agreements. Interpretation of certain multilateral rules on subsidization and subsidized trade that are ambiguous or give rise to legal uncertainty may be adopted by the Ministerial Conference or the General Council on the basis of a recommendation by the Subsidies and Countervailing Duties Committee and the Agriculture Committee.[198]

Finally, multilateral rules on subsidies and climate change mitigation may also be adjusted through adoption of a waiver. Climate change-related subsidies identified as those that contribute to the implementation of policies and measures listed in Article 2.1(a) of Kyoto Protocol may be exempted from actions under the ASCM by

---

[194] Hufbauer, G.C., Charnovitz, S., Kim, J., *Global Warming and the World Trading System*, Peterson Institute for International Economics, March 2009, pp. 97-98.

[195] Ibid.

[196] The WTO Agreement, Article II:3.

[197] Ibid, Article IX:1.

[198] Ibid, Article IX:2.

virtue of a waiver adopted by the WTO Members provided that such subsidies are consistent with established principles (e.g. non- discrimination, transparency, information and knowledge sharing, including technology transfer).[199] The waiver-based approach is able to determine the ambit of domestic subsidization policy space and provide greater legal certainty with regard to implementation of identified climate-related subsidies, at least over the defined timeframe.

4.3.2. Litigation-based adjustment of multilateral trading rules on subsidization and subsidized trade: clarification of the existing rules and justification of inconsistency within the dispute settlement system

The other possibility to achieve greater coherence between the global climate change regime and multilateral trading system is to invoke provisions of Article XX(b) and (g) of GATT 1994 that may justify implementation of the legitimate public policy measures related to trade that are inconsistent with Members' obligations under the WTO Agreement. However, to date there is no full clarity over the applicability of Article XX of GATT 1994 to Multilateral Agreements on Trade in Goods annexed to the WTO Agreement, including the ASCM. Nonetheless, the ASCM is directly linked with GATT 1994 by virtue of advancing the rules of Articles VI and XVI of this Agreement and does not explicitly exclude itself from the scope of Article XX.[200] Moreover, failure to justify implementation of certain trade-restrictive measures that pursue legitimate public policy objectives and satisfy the requirement of Article XX of GATT 1994 while justifying potentially more trade-distortive measures would undermine legitimacy of the multilateral trading system as well as legitimate expectations of its Members.[201] This gap could be filled by virtue of "an interpretative understanding not requiring treaty amendment that the general exceptions provision in the GATT (Article XX) applies also to the SCM Agreement in as much as the SCM Agreement is a *lex specialis.*"[202] The dispute settlement system is also able to dispel uncertainty over the scope of Article XX by clarifying the relationship between this provision of GATT 1994 and other Multilateral Agreements on Trade in Goods,

---

[199] Howse, R., "Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis", the International Institute for Sustainable Development, May 2010, p. 24.

[200] Jegou, I., Rubini, L., (2011); *The Allocation of Emission Allowances Free of Charge: Legal and Economic Considerations*; ICTSD Programme on Competitiveness and Sustainable Development; Transition to a Low Carbon Future Series; Issue Paper No.18; International Centre for Trade and Sustainable Development, Geneva, Switzerland, www.ictsd.org, p. 40.

[201] Howse, R., "Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis", the International Institute for Sustainable Development, May 2010, p. 17.

[202] Ibid, p. 25.

although it might "put the WTO dispute settlement system under considerable strain and end up being politically troublesome".[203]

WTO jurisprudence has already established the applicability of Article XX(b) and (g) for justification of trade-restrictive measures implemented with the aim of environmental protection.[204] Some subsidies provided in order to promote implementation of climate change policy measures related to emissions reduction may distort trade being, in law or in fact, contingent upon either export performance or the use of domestic over imported goods, or have adverse effects on the interests of other WTO Members, causing material injury to the domestic industry, nullifying or impairing benefits accruing under GATT 1994 or seriously prejudicing Member's interests. Such subsidies can be challenged in the WTO or countervailed[205] irrespective of their relation to climate change policy. A subsidizing Member may invoke Article XX(b) and (g) as a defense for justification of its subsidy program that distorts trade or causes adverse effects[206] to the interests of other WTO Members. However, arguing that challenging a subsidy qualifies for the general exception under Article XX, the subsidizing Member must demonstrate that such subsidy: (i) is 'necessary to protect human animal or plant life or health' (i.e. subsidy shall contribute to emissions reductions that in turn contribute to climate change mitigation[207]) or 'relates to the conservation of exhaustible natural resources' (i.e. subsidy must be "primarily aimed at" the conservation of clean air[208]); and (ii) 'not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade'. Most likely, export and import substitution subsidies

[203] Jegou, I., Rubini, L., (2011); *The Allocation of Emission Allowances Free of Charge: Legal and Economic Considerations*; ICTSD Programme on Competitiveness and Sustainable Development; Transition to a Low Carbon Future Series; Issue Paper No.18; International Centre for Trade and Sustainable Development, Geneva, Switzerland, www.ictsd.org, p. 47.

[204] Report of the Appellate Body, Brazil – Measures Affecting Import of Retreated Tyres, WT/DS332/AB/R, dated 3 December 2007, paragraph 151, Panel Report, *United States - Standards for Reformulated and Conventional Gasoline*, WT/DS2/R, 29 January 1996 and Report of the Appellate Body, *United States - Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, dated 29 April 2006.

[205] Only in case of injury to domestic industry established according to the rules of the Part V of the ASCM.

[206] As Howse (2010) noted Article XX is irrelevant in case of unilateral actions that offset established injury to the domestic industry by virtue of CVDs.

[207] The Appellate Body made important conclusion in *Brazil – Tyres* Case (paragraph 151) that "it is difficult to isolate the contribution to environmental objectives of one specific measure from those attributable to the other measures that are part of the same comprehensive policy" and that "the results obtained from certain actions—for instance, measures adopted in order to attenuate global warming and climate change . . . can only be evaluated with the benefit of time."

[208] Report of the Appellate Body, *United States - Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, dated 29 April 2006, p. 18.

could hardly be justified under Article XX(b) and (g) because of availability of a less trade-distortive alternative – production subsidies. Production subsidy programs that promote GHG emissions reductions may pass the two-tier test on their compliance with requirements of Article XX(b) and (g) of GATT 1994.

Therefore, climate change-related subsidies that affects trade interests of other WTO Members might avoid actions[209] under the ASCM by virtue of their justification under Article XX(b) and (g) of GATT 1994. However, this possibility to achieve greater coherence between the global climate change regime and multilateral trading system is not able to ensure a desired level of legal certainty and predictability as its results are attributable only to the particular case and situation. Thus, outcomes of the litigation-based approach may induce WTO Members to negotiate necessary amendments to the multilateral trading rules.

5. Conclusion

The future global climate change and trade regimes twist in the wind as countries are either unable to strike a new, comprehensive climate change deal or to conclude the decade-long round of multilateral trade talks. Most likely, this could not be done in the short-term perspective. This impasse means that countries have different visions of the future global architecture and governance. A delicate equilibrium exists but how long it will last is difficult to predict. Long-standing uncertainty will have negative implications on both the multilateral trading system and the global climate change regime.

At the current, transitional stage, governments have not yet begun implementation of strict measures aimed at meaningful emissions reduction. Climate change-related markets and industries are still emerging and some space for growth remains. However, competition is increasing and it is reaching a level when trade frictions begin to occur.

Climate change mitigation policies inevitably include trade measures, the application of which could give rise to disputes about their consistency with WTO law. Subsidies will be an important instrument of climate change policy and it is very likely that WTO Members will use subsidies to enhance competitiveness of their industries. Subsidization may lessen the resistance of emissions-intensive and trade-exposed industries to climate change policy. Consequently, the WTO law must be able to

[209] Except application of CVDs.

adequately address those governmental practices that are against multilateral rules on subsidization and subsidized trade.

Multilateral rules on subsidies and subsidized trade contain certain gaps and loopholes that could affect implementation of climate change-related subsidies in an effective manner. For example, the concept of specificity impedes WTO Members' ability to allocate scarce public funds effectively by targeting the most important area of climate change mitigation policy. In some cases WTO law on subsidies is not able to support climate change mitigation policy because of the gaps or loopholes in the current climate change law as in for example, the lack of clarity in the operation of emissions trading schemes. Therefore, a greater level of coherence between two bodies of international law should be achieved. Prompt conclusion of the new, comprehensive climate change agreement could ensure desired coherence, synergy and mutual supportiveness of climate change and trade regimes. WTO law also contains some instruments that may contribute to these objectives and remove potential uncertainty and unpredictability for the benefit of sustainable development – whether through negotiations or litigation. The ultimate result will depend on countries' efforts to cooperate in resolving a very complex and challenging issue on the international agenda.

Bibliography:

- Adede, Andronico O., “The Treaty System from Stockholm (1972) to Rio de Janeiro (1992)” (1995). *Pace Environmental Law Review.* Paper 267, Volume 13, 1995, http://digitalcommons.pace.edu/envlaw/267
- Bodansky, D., “The Copenhagen Climate Change Conference: A Postmortem”, The American Journal of International Law, Vol. 104, No. 2 (April 2010).
- Bolin, B., *A History of the Science and Politics of Climate Change. The Role of the Intergovernmental Panel on Climate Change*, Cambridge: Cambridge University Press, 2007.
- Brack, D., Grubb, M., *International Trade and Climate Change Policies*, Royal Institute of International Affairs, 2000.
- Desta, M., “The Evolution of the WTO Agreement on agriculture from its Uruguay Round Origins to Its Post-Hong Kong Directions”, May 2006, FAO Legal Office, available at: http://www.fao.org/legal/prs-ol/lpo55%20.pdf.
- Jegou, I., Rubini, L., (2011); *The Allocation of Emission Allowances Free of Charge: Legal and Economic Considerations*; ICTSD Programme on Competitiveness and Sustainable Development; Transition to a Low Carbon Future Series; Issue Paper No.18; International Centre for Trade and Sustainable Development, Geneva, Switzerland, www.ictsd.org.
- Horlick, G. N. and Clarke, P. A., “The 1994 WTO Subsidies Agreement”, *World Competition* 17(4), 1994, pp. 41-54.
- Howse, R., “Climate Change Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis”, the International Institute for Sustainable Development, May 2010.
- Hufbauer, G.C., Charnovitz, S., Kim, J., *Global Warming and the World Trading System*, Peterson Institute for International Economics, March 2009.
- Jackson, J. H., *The World Trading System*, Cambridge, MA: MIT Press, 1997, 2nd edition.
- Mavroidis, P.C., Messerlin, P. A., Wauters, J. M., *The Law and Economics of Contingent Protection in the WTO*, Edward Elgar Publishing, 2008.
- Myers, N., “Perverse Subsidies”, Encyclopedia of Earth. Eds. Cutler J. Cleveland (Washington, D.C.: Environmental Information Coalition, National

Council for Science and the Environment), August 9, 2007. Available at: http://www.eoearth.org/article/Perverse_subsidies.

- O'Connor, B., "Subsidies in Agriculture after the Dairy, Cotton and Sugar Disputes", Geneva: UNCTAD, 2007.
- Rubini, L., "The Subsidization of Renewable Energy in the WTO: Issues and Perspectives", Swiss National Center for Competence in Research, NCRR Trade Working Paper No 2011/32, June 2011.
- Sykes, A., O., "The questionable case for subsidies regulation: A comparative perspective", Paper presented at the Yale Leitner Center WTO Conference, April 3, 2009.
- Van Den Bossche, P., 2008, *The law and policy of the World Trade Organization*, Cambridge: Cambridge University Press, 2nd edition.
- UNEP, IISD, *Environment and Trade. A Handbook*, 2nd Edition, Winnipeg, Manitoba, Canada, International Institute for Sustainable Development, 2005.
- UNCTAD, *Handbook on Dispute Settlement, Anti-Dumping Measures*, Geneva: UNCTAD, 2003.