

Chapter 12

Security in a “Warming World”: Competences of the UN Security Council for Preventing Dangerous Climate Change

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Extensive climate changes may alter and threaten the living conditions of much of mankind. They may induce large-scale migration and lead to greater competition for the earth's resources. Such changes will place particularly heavy burdens on the world's most vulnerable countries. There may be increased danger of violent conflicts and wars, within and between states.¹

I. Introduction

Without resolute counteraction, the effects of climate change are likely to exceed many societies' adaptive capacities to internal or external stresses within the coming decades. This could result in destabilization and violence, jeopardizing national and international security to a new and unknown degree.² Currently there still is a window of opportunity for avoiding dangerous anthropogenic climate change by adopting a dynamic and coordinated global climate policy. Yet, the outlook of getting an effective international climate treaty into place in time to avoid dangerous climate change is dim; the chances for stopping climate change at a non-dangerous level rapidly decreasing.

If not halted, the likelihood sharply increases that climate change will draw ever-deeper lines of division and conflict in international relations. It has the potential to trigger numerous conflicts between and within countries over the distribution of resources (especially water and land), over the management of migration, or over compensation payments between the countries mainly responsible for climate change and those countries most affected by its destructive effects.³

In giving recognition to this threat, on 17 April 2007, the Security Council held its first-ever debate on the impact of climate change on international peace and

¹ Excerpt from the Nobel Committee's explanation for the award of the 2007 Nobel Peace Prize to the Intergovernmental Panel on Climate Change and Al Gore.

² German Advisory Council on Global Change (WGBU), *Climate Change as a Security Risk* (2007) at 23.

³ Ibid.

security.⁴ No concrete action or decision followed this debate. The main achievement was perhaps that of global awareness rising of the consequences of climate change rather than any concrete outcome.

Prior and during the debate there had been strong opposition from some countries to any suggestion that the Security Council play a role in the international response to climate change. At the same time, the ever-increasing urgency of decisive action to address climate change, combined with the challenge's scale and complexity, suggest that at this stage all options (including a more active role of the Security Council) ought to be examined.

The second part will give an overview over the controversial discussion about the link between climate change and security threats (part 2). The third part deals with the normative concept of peace and security in the UN Charter and its relationship to climate change as a (possible) non-military threat. Part four assesses the current multilateral climate regime for its effectiveness to prevent climate change related threats. The fifth part investigates the mandate of the Security Council with regard to addressing environmental threats. Of particular interest in this context are the Council's competences to impose sanctions, to 'legislate', and to condemn state actions or inactions.⁵ Also, in this part, the competences of the Security Council to request of the International Court of Justice an advisory on opinion legal questions in relation to climate change will be analyzed in connection. Part six concludes this chapter.

II. The Factual Link between Climate Change and International Security

The risks posed by climate change are real and impacts are already tangible. The Intergovernmental Panel on Climate Change demonstrated in its Fourth Assessment Report that in order to avoid a temperature rise of 2°C above pre-industrial global mean temperature concentrations of CO₂-equivalents in the atmosphere need to be stabilized. Such stabilization requires global greenhouse gas (GHG) emissions to be reduced by up to 85 per cent, peaking between now and 2015.⁶

4 UN Department of Public Information, News and Media Division, *Security Council Holds First-ever Debate on Impact of Climate Change on Peace and Security*, UN Doc. SC/9000, 17 April 2007.

5 The possibility of use of force is omitted from this chapter. See for an extensive analysis of this issue the chapter by Ole Kristian Fauchald and Jo Stigen in this book.

6 IPCC, 2007: Summary for Policymakers. In: *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, Table SPM.5, at 15. This global reduction target (relative to 2000 emission levels) is indifferent to countries' capabilities or responsibilities. In order to comply with the principle of common but differentiated responsibilities, this target needs to be broken down to specific targets for different country groups. Such differentiation, if emission growth for developing countries is included, could in fact lead to 'carbon negativity' (not just carbon neutrality) for the most industrialized countries, meaning emission reduction targets above 100 per cent. See Stockholm Environment Institute, *Accounting for emissions from*

A temperature increase above 2°C is likely to trigger a number of tipping points that would lead to accelerated, irreversible and largely unpredictable climate changes. Such changes may lead to unprecedented security scenarios. In this context, the EU High Representative for the Common Foreign and Security Policy and the European Commission to the European Council demanded that 'investment in mitigation to avoid such scenarios, as well as ways to adapt to the unavoidable should go hand in hand with addressing the international security threats created by climate change; both should be viewed as part of preventive security policy'.⁷

If, by 2020, political efforts to limit temperature increases to 2°C have failed, the international community must prepare itself to deal with climate-related conflicts. If this temperature threshold is crossed, the likelihood of conflicts increases significantly. Such conflicts include conflicts over resources (based on reduction of arable land, widespread shortage of water, diminishing food and fish stocks, increased flooding and prolonged droughts), conflicts over loss of territory and border disputes,⁸ situations of fragility and increasing instability in weak or failing states, and tension over energy supply.⁹

The greatest single conflict-prone impact of climate change could be environmentally-induced human migration. The UN estimates that there will be millions of environmental migrants by 2020 with climate change as one of the major drivers of this phenomenon.¹⁰ Some countries that are extremely vulnerable to climate change

a consumption perspective (April 2008) available at: (<http://www.sei-us.org/climate-and-energy/CO2andTrade.htm>). Similarly, the International Energy Agency states in a recent report that the 450ppm concentration target implies that net greenhouse gas emissions have to turn negative (i.e. carbon absorption exceeding gross emissions) by the end of this century. IEA, *World Energy Outlook 2008*, 12 November 2008.

7 S113/08, 14 March 2008, *CLIMATE CHANGE AND INTERNATIONAL SECURITY*, Paper from the High Representative and the European Commission to the European Council, at 1.

8 In this context, the High Representative and the European Commission to the European Council note: 'Scientists project major changes to the landmass during this century. Receding coastlines and submergence of large areas could result in loss of territory, including entire countries such as small island states. More disputes over land and maritime borders and other territorial rights are likely. There might be a need to revisit existing rules of international law, particularly the Law of the Sea, as regards the resolution of territorial and border disputes. A further dimension of competition for energy resources lies in potential conflict over resources in Polar Regions which will become exploitable as a consequence of global warming. Desertification could trigger a vicious circle of degradation, migration and conflicts over territory and borders that threatens the political stability of countries and regions.' *Ibid* at 4.

9 S113/08, 14 March 2008, *CLIMATE CHANGE AND INTERNATIONAL SECURITY*, Paper from the High Representative and the European Commission to the European Council, at 2-5.

10 UN University's Institute for Environment and Human Security warned that the international community should prepare for 50 million 'environmental refugees' by 2010. (Adam, D., '50m environmental refugees by end of decade, UN warns,' *The Guardian*, 12 October 2005). The UN Environment Programme (UNEP) argues that by 2060 there could be 50 million 'environmental refugees' in Africa alone. (UNEP, *Africa Environment Outlook, Past, Present and Future*, 2002) In 2007 Christian Aid suggests that nearly a billion

are already calling for international recognition of such environmentally-induced migration. It is, however, important to note that all current predictions about the exact number of 'climate refugees' are fraught with methodological problems. So far, scientists have focused on establishing the extent and nature of anthropogenic climate change and its physical impact on weather systems and coastlines. Much less focus has been directed to the empirical analysis of the impacts of climate change on the distribution human populations.¹¹ The simple fact is that nobody really knows with any degree of precision what climate change will mean for human population movement and distribution.¹² This is unsurprising; the science of climate change is complicated. In addition, the interconnections between environmental conditions, societies with widely differing resources and varied capacities to adapt to external shocks, and resulting conflict potential add a high degree of complexity.¹³

Finally, climate change impacts may also pose a threat to international governance. The multilateral system is at risk if the international community fails to address the threats outlined above. The High Representative and the EU Commission stated in this context that

Climate change impacts will fuel the politics of resentment between those most responsible for climate change and those most affected by it. Impacts of climate mitigation policies (or policy failures) will thus drive political tension nationally and internationally. The potential rift not only divides North and South but there will also be a South – South dimension particularly as the Chinese and Indian share of global emissions rises. The already burdened international security architecture will be put under increasing pressure.¹⁴

In the absence of absolute scientific certainty about the social and political impacts of climate change, the phenomenon is best viewed as a threat multiplier which exacerbates existing trends, tensions and instability. Rather than rejecting the threat in lieu of exact numbers, the risk of climate related human displacement needs to

people could be permanently displaced by 2050: 250 million by climate change-related phenomena such as droughts, floods and hurricanes, and 645 million by dams and other development projects. (Christian Aid, *Human Tide: The Real Migration Crisis*, 2007).

11 Brown, O., 'The numbers game', 31 *Forced Migration Review: Climate Change and Displacement*, October 2008, at 8.

12 Ibid.

13 Studies on environmental security have had focus on either a locality or region or particular sector or medium, such as soil degradation, water scarcity and conflicts over resources. Moreover, empirical research has mostly been conducted *ex-post*. Considering the impacts of climate change, however, requires an extension of the analytical time horizon including the coming decades, when the security-relevant disruption that is to be expected as a result of climate change is likely to occur. Also, research on environment and conflict has been dominated largely by political science. Transdisciplinary or interdisciplinary research of natural sciences and other social sciences has so far occurred only tentatively or not at all. See WBGU, 2007.

14 S113/08, 14 March 2008, *CLIMATE CHANGE AND INTERNATIONAL SECURITY*, Paper from the High Representative and the European Commission to the European Council, at 5.

be acknowledged and precautions put in place. Climate change needs to be seen in the broader concept of human security, which focuses stronger on effects on the individual.¹⁵ In line with this concept, it is clear that many issues related to the impact of climate change on international security are interlinked requiring comprehensive policy responses.

In any event, preventing dangerous climate change means reducing the likelihood of climate-related individual and international security threats. Therefore, a pro-active climate protection policy must be in place with the aim of keeping global warming as close to the 2°C limit as possible. At the same time strategies for adaptation to unavoidable climate change must be intensified and oriented towards the type of climate impact scenario that can be expected. The greater the delay in commencing efforts to mitigate climate change and to adapt to its impacts, the more expensive such efforts will become. Development that leads to missed opportunities to protect the climate will entail far higher costs than a reference scenario in which compliance with the 2°C target is achieved.¹⁶

III. Climate Change and the Normative Concept of 'International Peace and Security'

After we concluded in the previous paragraph that climate change increases the risk of conflict by functioning as a threat multiplier, the next question is whether this kind of threat can be linked to the normative concept of 'international peace and security' as entailed in the UN Charter or in other words, is climate change a 'Security Council issue'? This question begs for analysis of both the political responses to climate change as a possible security threat (multiplier) and the legal substance of the UN Charter provisions.

A. Political Views

Analysing the political link between climate change related threats and international peace and security is arguably best done by examining the Security Council debate on climate change on 17 April 2007. The debate was requested by the U.K. and chaired by British Foreign Secretary, Margaret Beckett. She was of the clear opinion that climate change was a security issue, but it was not a matter of narrow national security –

15 UNDP, *Human Development Report 1994: New Dimensions of Human Security*, Oxford 1994. For definitions of 'security', see Brauch, H.G., *Environment and Human Security*, InterSecTions, 2/2005 (Bonn: UNU-EHS); Brauch, H.G., *Threats, Challenges, Vulnerabilities and Risks in Environmental and Human Security* (Bonn: UNU-EHS) 1/2005; and Commission on Human Security (2003) *Human Security Now*, Commission on Human Security: New York <http://www.humansecurity-chs.org/>. See also Bogardi, J. and Brauch, H.G., (2005) "Global Environmental Change: A Challenge for Human Security – Defining and conceptualising the environmental dimension of human security", in: Rechkemmer, A., (ed.) *UNEO – Towards an International Environmental Organization* (Nomos: Baden-Baden, 2005), at 85–109.

16 *Stern Review on the Economics of Climate Change*, 2006 (available at: http://www.hm-treasury.gov.uk/stern_review_climate_change.htm; and WBGU, 2007).

climate change was about “our collective security in a fragile and increasingly inter-dependent world”.¹⁷ Yet, there was no unanimity among the 50 participating states as to this link and the possible role of the Security Council.¹⁸

Among those states who were in favour of dealing with climate change at the level of the Security Council were European states and a number of states most prone to the effects of climate change, i.e. some coastal states and least developed developing countries. Those states accepted a broad concept of security, including human and international security. The main argument was that severe environmental degradation and environmentally induced conflicts triggered by climate change can be regarded as a threat to international security and world peace and that the impacts of climate change constitute a particularly high potential risk in this context. Dealing with climate change as a security issue is therefore seen as a strategy to *prevent* conflict.¹⁹ In the context of conflict prevention, climate change needs to be seen in conjunction with other global threats, such as poverty, water scarcity, energy insecurity and diseases.²⁰ In a sense the threat of dangerous climate change was seen as a positive driving force in stimulating concerned action. Margaret Beckett declared “[So] climate change can bring us together, if we have the wisdom to prevent it from driving us apart”.²¹ In line with this view, the role of the Security Council was seen as playing an advisory role, rather than taking enforcement action.

Some low-lying island states, however, saw the risk of inundation of their lands by rising sea levels as an immediate security threat that can be linked to climate change. Papua New Guinea’s representative said that ‘the impact of climate change on small islands was no less threatening than the dangers guns and bombs posed to large nations.’²² They therefore expected a more active role of the Council by keeping the issue of climate change under continuous review and ensuring that all countries contributed to solving the problem and that those efforts commensurate with their resources and capacities. They also expected the Council to review sensitive issues, such as implications for sovereignty and international legal rights from the loss of land, resources and people.²³

In stark contrast to these views were the positions of fast developing economies, such as China and India, who considered climate change a development issue, rather than a security threat. The reasons for keeping climate change out of the Councils programme of work are linked to a fear that developed countries might use the Security Council as a tool to influence the development strategy – and therefore impact on state sovereignty – of developing nations.²⁴ Others agree to climate change

17 See SC/9000.

18 See for an overview of the debate: Sindico, F., ‘Climate Change: A Security (Council) Issue?’, 1 *Carbon and Climate Law Review* (2007) at 29–34.

19 See SC/9000, Statement of Germany and France.

20 See SC/9000, Statement of Germany. Also WBGU, 2007.

21 SC/9000.

22 SC/9000, Statement of Papua New Guinea on behalf of the Pacific Island Forum.

23 Ibid.

24 SC/9000. Statements who addressed this fear included those of Qatar, Pakistan, Egypt, China, India and Brazil.

but suggest the issue be dealt with either by more general or more specialized UN bodies, such as the UN General Assembly, the UN Economic and Social Council, or the UN Commission on Sustainable Development.²⁵

The political landscape is divided. While there seems to be a developing consensus on viewing climate change as a security issue, it does not lead to generally accepting a role of the Security Council – whether active or passive – in this context.

B. The Legal Framework

The Security Council's primary responsibility according to Article 24.1 of the UN Charter is the maintenance of international peace and security. The language of the UN Charter is informed by the post-Second World War situation in which it was drafted and concerns primarily military activities. The inclusion of non-military threats to international peace and security, such as infectious diseases²⁶ and terrorism,²⁷ is a rather recent phenomenon.²⁸ Environmental threats, however, have not yet been 'officially' included into the catalogue of threats to international peace and security.²⁹

The powers of Security Council to take coercive, binding action to maintain or restore international peace and security against a threat (whether military or non-military) are defined in Chapter VII of the UN Charter. Whether the Security Council can take such action is contingent upon a "threat to the peace, breach of the peace, or act of aggression", according to Article 39. In practice, the Council has identified a 'threat to the peace' much more often than a breach of the peace, and has proven reluctant to ever identify an act of aggression.³⁰ A 'threat to the peace' does not necessarily mean a threat to use force. The Council has taken a wide interpretation of 'threat to the peace' and has included internal conflict and the refusal to act against terrorism.³¹ The determination of whether an environmental threat amounts to a threat to peace is left to the Security Council with a wide margin of discretion.

25 See for a discussion of these views, Sindico, 2007, at 32–33.

26 See UN Doc. UN/S/RES/1318 (2000), On Ensuring an Effective Role for the Security Council in the Maintenance of International Peace and Security, 7 September 2000.

27 S/RES/1373 (2001).

28 For an overview see Knight, A., 'Global Environmental Threats: Can the Security Council Protect our Earth?', *New York University Law Review* (2005) at 1565–1566.

29 The only exception being the recognition of Iraq's responsibility for compensating the environmental damages inflicted on Kuwait during in the 1990–1991 Gulf War. Security Council Resolution 687 (1991) states that Iraq is "liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq's unlawful invasion and occupation of Kuwait." S/RES/687 (1991) para. 16.

30 Gray, C., 'The Use of Force and the International Law Order' in: Evans, M.D., *International Law*, 2nd ed. (2006) at 606.

31 Ibid.

The Security Council has so far taken a somewhat cautious approach in this regard. Yet, a number of legal arguments can be listed, which allow the inclusion of climate change under the ambit of Article 39. In the following, three arguments will be explained in more detail: (i) dynamic or evolutionary interpretation of Article 39, (ii) protection of human rights, and (iii) breach of an essential international environmental obligation.

i. Dynamic Interpretation of Article 39 UN Charter

First, although there is no explicit mentioning of environmental protection – or the prevention of environmental threats – in the Charter, this does not mean that an inclusion of environmental objectives cannot be derived from a broader interpretation of the provisions of the Charter. It could further be argued that environmental protection lies within the implied powers of the UN. Article 1.1 states as one purpose of the UN the maintenance of international peace and security and calls for taking effective collective measures for the prevention and removal of threats to peace, while Article 1.3 requires international cooperation in solving international problems of an economic, social, cultural or humanitarian character. It can be argued that the protection of the environment and prevention of environmental threats can be essential elements in solving international problems of economic or social character.³² Yet, while the debate around of ‘environmental security’ has been contentious for more than a decade, it has recently gained momentum.³³ Following an initiative by former UN Secretary General Kofi Annan in 2004 a High-Level Panel assessed ‘new’ threats to international security.³⁴ The assessment, which identified environmental degradation as one of the major threats, was explicitly approved by the Secretary General.³⁵ The assessment makes explicit mentioning of climate change as a driver in the context of disaster related conflicts.³⁶ As the climate change crisis has intensified, have the security implications been investigated with much greater intensity outside the UN. In the last two years alone there have been a number of reports and books published

32 See Simma, B., *The Charter of the United Nations: A Commentary* (Oxford, 1994).

33 See Birnie, P., and Boyle, A., *International Law and the Environment* (2002) at 48, with further references. See also the chapter of Ole Kristian Fauchald and Jo Stigen in this book for a more detailed discussion.

34 High Level Panel on Threats, Challenges and Change, *A More Secure World: Our Shared Responsibility*, U.N. GAOR, 59th Session, U.N. Doc. A/59/565 (Dec. 2, 2004).

35 The Secretary General, Report of the Secretary-General, *In Larger Freedom: Towards Development, Security, and Human Rights for All*, delivered to the General Assembly, U.N. Doc. A/59/2005 (Mar. 21, 2005).

36 “53. Environmental degradation has enhanced the destructive potential of natural disasters and in some cases hastened their occurrence. The dramatic increase in major disasters witnessed in the last 50 years provides worrying evidence of this trend. More than two billion people were affected by such disasters in the last decade, and in the same period the economic toll surpassed that of the previous four decades combined. If climate change produces more acute flooding, heat waves, droughts and storms, this pace may accelerate.” *A More Secure World: Our Shared Responsibility*, 2004.

by think tanks, non-governmental organizations and universities identifying climate change as a threat to individual, national and/or international security.³⁷

The conclusions of the assessments have yet to find repercussion in a Security Council resolution. However, the door has been 'pushed open' for justifying the legality of a climate change related action of the Security Council based on an evolutionary interpretation of the Charter. The assessment of the High Level Panel makes clear that the significance of the Charter term has changed over time and with the evolution of science and the law. It is therefore of importance to give legal recognition to this change and to ensure necessary dynamism of the UN, its laws and its organs.

ii. Protection of Human Rights

The second legal argument for the inclusion of climate change related threats into the ambit of the determinations made by the Security Council can be derived from the commitment of the UN to the promotion of universal respect for human rights and fundamental freedoms in Article 55 (c) UN Charter. The link between climate change and human security, outlined above, also has repercussions for the protection of human rights. The direct and indirect effects of climate change can affect some of the most fundamental human rights.

In order to highlight this link between climate change impacts and human rights violations we can look at the example of impacts on people living in Arctic regions. Average annual temperatures in the Arctic have increased by approximately double the increase in global average temperatures.³⁸ The direct impacts of global warming include higher temperatures, sea-level rise, melting of sea ice and glaciers, increased precipitation in some areas and drought in others. Indirect social, environmental, economic and health impacts will follow, including increased death and serious illness in poor Arctic communities, decreased crop yields, heat stress in livestock and wildlife, and damage to coastal ecosystems, forests, drinking water, fisheries, buildings and other resources needed for subsistence. If global warming continues unchecked it threatens to destroy the culture of Arctic peoples, to render their land uninhabitable, and to deprive them of their means of subsistence. The harm caused to their way of life has already been claimed serious enough so as to violate some fundamental internationally recognised human rights.³⁹ International human rights

37 See, *inter alia*, Abbott, C., *An Uncertain Future: Law Enforcement, National Security and Climate Change* (2008); Paskal, C., 'How climate change is pushing the boundaries of security and foreign policy' Chatham House Energy, Environment and Development Programme EEDP CC BP 07/01; Brown, O., Hammill, A. and McLeman, R. 'Climate Change as the "new" security threat: implications for Africa' 83 *International Affairs* (2007), at 1141; Busby, J.B., *Climate Change and National Security. An Agenda for Action* (2007); and Smith, D., and Vivekananda, J., *A Climate of Conflict. The Links between climate change, peace and war* (2007).

38 Arctic Council and the International Arctic Science Committee, *Arctic Climate Impact Assessment* (ACIA), 2004.

39 On March 1, 2007, the Inter-American Commission on Human Rights (IACHR) of the Organization of American States held a hearing to investigate the relationship between

that can be affected include the right to life, the right to residence and movement, the right to inviolability of the home, the right to preservation of health and to well-being, the rights to benefits of culture, and the right to work.

As exemplified by this scenario, it can be argued that human rights violation as a consequence of climate change could trigger a more active role of the Security Council in addressing inaction of the most polluting states and their contribution to climate change. Massive and egregious infringements of human rights can under certain circumstances lead the UN Security Council to decide on collective countermeasures or to authorize or recommend sanctions.⁴⁰ The Council has on occasions of human rights violations decided or recommended economic sanctions such as breaking off economic relations, embargoes on imports and exports, the blocking of financial operations or the suspension of co-operation in the scientific and technical fields.⁴¹ Such economic or political sanctions are a public condemnation of the states that are disrespecting human rights caused by continuing massive greenhouse gas emissions. They are primarily intended to condemn a certain form of behaviour and thereby 'delegitimize' it. Cassese suggests that these sanctions could be used 'to prove to the world public opinion that the responsible State was wrong inasmuch as it acted contrary to internationally accepted standards.'⁴²

iii. Breach of an Essential International Environmental Obligation

Thirdly, the argument has been made, that a breach of an international environmental obligation of 'essential importance' may qualify as a threat to peace and security.⁴³ Such environmental obligation will normally arise out of a treaty or a customary obligation. The UN Framework Convention on Climate Change (UNFCCC) is particularly relevant in the context of climate change impacts.⁴⁴ The central question is whether it contains obligations for States that can be breached.

global warming and human rights. The hearing was in response to a petition filed by Ms. Sheila Watt-Cloutier, the elected Chair of the Inuit Circumpolar Conference (ICC), in December 2005. The petition sought relief from violations of the human rights of Inuit resulting from global warming caused by greenhouse gas emissions from the United States. The IACHR rejected the petition on November 16, 2006.

40 See for a discussion of the link between safeguarding human rights and the competences of the Security Council: Cassese, A., *International Law*, 2nd ed. (OUP, 2005) at 347–348, and 373–374. He notes that massive and egregious infringements of human rights can under certain circumstances trigger competences of the Security Council under chapter VII of the Charter.

41 See Conforti, B., *The Law and Practice of the United Nations*, Kluwer Law International (2000) at 185–194.

42 Cassese, 2005, at 312.

43 Herbst, J., *Rechtskontrolle des UN-Sicherheitsrates* (1999) at 416.

44 The relevance of the Kyoto Protocol is limited in the context of establishing an international environmental obligation of 'essential importance', whose breach can amount to a threat to peace. The quantifiable emission reduction obligations in the Protocol amount in sum to less than 5 per cent below 1990 levels of 37 States. These almost insignificant

It can be claimed that the ultimate objective of the UNFCCC is to provide a duty of prevention with regard to dangerous climate change. The ultimate objective of the Convention is:

to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas emissions at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow eco-systems 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.⁴⁵

It is possible to interpret Article 2 UNFCCC as containing the duty of preventing dangerous interference with the climate system on the basis of current scientific and legal standards of protection.⁴⁶ Moreover, Article 4.2 (a) UNFCCC can be interpreted as entailing a concrete obligation for Annex I – industrialized – Parties to reduce their greenhouse gas emissions, which complements the objective. According to Article 4.2

Each Annex I Party shall adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. These policies and measures will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention.

Article 4.2 UNFCCC when interpreted in a teleological way in the light of the objective according to Article 31 Vienna Convention on the Law of Treaties (VCLT) sets forth an 'obligation of conduct' to reverse the long term trend of ever-increasing greenhouse gas emissions. This conduct is required in order to stabilize atmospheric concentrations. Article 4.2 UNFCCC in conjunction with Article 2, therefore, obliges parties to take action to adopt policies and measures to secure the stabilization of atmospheric concentrations of greenhouse gases. These Articles together could, therefore, be understood as a primary rule that can be breached. Such a breach is committed where a state is taking no or insufficient measures to modify upward emission trends. If an Annex I Party has increased its emissions continually since its ratification of the UNFCCC, this could amount to a breach of an international environmental obligation of 'essential importance'.⁴⁷

Moreover, customary international law also clearly prohibits states from knowingly allowing their territory to be used to cause harm to other states. In environ-

emission reduction targets with regard to halting dangerous climate change and the limited number of obliged States lead to the conclusion that a breach of obligations under the Protocol cannot be considered a 'threat to peace'.

⁴⁵ Article 2 UNFCCC.

⁴⁶ See, in particular, Verheyen, R., *Climate Damage and International Law: Prevention Duties and State Responsibilities* (Martinus Nijhoff, Leiden, 2005) and Voigt, C., *Sustainable Development as a Principle of International Law – Resolving Conflicts between Climate Measures and WTO Law*, Leiden: Martinus Nijhoff Publishers, (2009) at 67–70.

⁴⁷ For further discussion, see Voigt, C., 'State Responsibility for Climate Change Damages', *Nordic Journal of International Law* 77 (2008) at 1–22; and Verheyen, 2005.

mental law, this obligation has been translated into the obligation to not cause harm to the environment of other states and to areas beyond any jurisdiction.⁴⁸ While the early formulation of this rule focused on avoiding transboundary pollution between neighbouring states, the no-harm rule now extends to relations between all states, however distant, and has also extended its scope to areas beyond a state's jurisdiction. The no-harm rule is also enshrined in Principle 21 of the Stockholm Declaration and Principle 2 of the Rio Declaration. It has frequently been referred to by international courts and tribunals and forms the foundation of international environmental law. The International Court of Justice in *Nuclear Weapons* and *Gabcikovo-Nagymaros* confirmed the 'general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment'.⁴⁹ Establishing a breach of this obligation is still facing a number of legal problems, such as establishing causation and defining the due diligence standard.⁵⁰ To overcome this challenge, it has been suggested, that the Security Council 'interprets' the content of that customary legal rule as 'prohibiting cross-border environmental harm, recognizing the long-term threat posed to all states by irresponsible use of national territory resulting in excessive greenhouse gas emissions'.⁵¹ Excessive emissions of greenhouse gases from a state's territory could therefore amount to a breach of the customary no-harm rule, which is an obligation of essential international importance and could – as such – comprise a threat to international peace.

Finally, as mentioned above, scientific uncertainty remains as to the concrete local or regional extent of climate change impact. Preventive action is warranted where science is readily available. In the context of climate change, however, risk scenarios linked to different emission paths are the basis for determination of consequences. Risk in this context is defined in terms of probability of a certain harm to occur and the magnitude of such harm. Where there is high risk of harm, either because probability of harm to human welfare is high or the harm is significant and potentially irreversible, or both – such as with climate change impacts as a result of atmospheric greenhouse emission concentrations above 450 ppm – a lower degree of scientific certainty needs to suffice in order to allow for action which lowers the threat. This is in line with the precautionary principle, as elaborated in principle 15 of the Rio declaration: 'Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective

48 The arbitral decision in the *Trail Smelter* case had a strong influence on the formulation and content of the no-harm rule. The tribunal concluded 'Under the principle of international law . . . no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another state or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.' *Trail Smelter (USA v. Canada)*, Award of 1941, III RIAA 1911, at 1965.

49 *Nuclear Weapons* ICJ Report 241, 1996, para. 29; re-stated in *Gabcikovo-Nagymaros Project*, ICJ Report 7, 1997, p. 41.

50 See Voigt, 2008.

51 Penny, C.K., 'Greening the Security Council: Climate Change as an Emerging "Threat to International Peace and Security"', *International Environmental Agreements* (2007) at 60.

measures to prevent environmental degradation'. The legal importance of this principle is consolidating and strong arguments can be made that it reflects a principle of customary international law.⁵² In the context of threat determination by the Security Council it could be used as a means to define international tolerance of risk of climate change related damage.⁵³ A determination of climate change as a threat to international peace can therefore be founded on the risk of harm that might occur, i.e. the magnitude of such harm or its probability (there could be a rather low probability of disastrous harm or a high probability of serious harm), even in the absence of scientific certainty. This is of essential importance when it comes to climate change impacts. By the time science can deliver clear, empirical data, time will have run out for preventing climate change-related threats.

Presumably, therefore, the Security Council could legally and legitimately be authorized to take preventive action under Chapter VII of the United Nations Charter in cases of climate-related threats to international peace and security and where grave violations of human rights obligations and international environmental law have occurred. Specific measures to address this threat would therefore fall within the scope of competences of the Security Council.

IV. UN Responses so far: Multilateral Climate Treaties and the Failure to Take Effective Action to Mitigate Climate Change

Climate change is a global phenomenon and calls for a collective response in the form of global partnerships.⁵⁴ Solutions, in order to be effective, need to be based on a global consensus for global action. Measures of the Security Council, especially coercive ones that can be imposed against the will of States, should therefore be envisaged as the last resort only.

It is thus necessary to determine whether the current form of international climate governance, the climate regime consisting of the UN Framework Convention on Climate Change and the Kyoto Protocol, provides a sufficient and effective approach to the prevention of climate change-related threats.

The purpose of this part is not to describe the climate change regime in detail, but to focus on some of its weak aspects in avoiding or addressing climate change conflicts.

The first shortcoming in this aspect is the general and vague language in the UNFCCC. Being a framework convention, inspired by creating broad consensus rather than establishing concrete, quantifiable emission reduction obligations, it has the downside of missing legal concreteness and, as a consequence, enforceability. A breach of the legal obligation that has been identified above will meet significant procedural and substantial obstacles if claimed in an international court.⁵⁵

52 See Sands, P., *Principles of International Environmental Law* (2003) at 179.

53 See Knight, supra note 28 at 1580.

54 UNDP (2004) *Reducing Disaster Risk: A Challenge for Development*. Geneva: UNDP, Bureau for Crisis Prevention and Recovery: <http://www.un.org/special-rep/ohrls/lhc/Global-Reports/UNDP%20Reducing%20Disaster%20Risk.pdf>.

55 For a discussion of these legal challenges see: Voigt, 2008.

Second, both the UNFCCC and the Kyoto Protocol, fall short when it comes to setting up effective mechanisms that aim to oblige States to significant reductions in their greenhouse gas emissions. While the UNFCCC does not contain any quantification of emission reductions, the Kyoto Protocol sets a specific target of reducing the overall emissions of the gases listed in its Annex A by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012.⁵⁶ This overall target applies exclusively to those States listed in Annex B of the Protocol. Both the limited geographical scope and brief duration of commitment (5 years) make this target already highly insufficient for halting temperature changes within the global 2 degree centigrade limit. Major emitters, such as the USA, but also fast growing economies with steep upwards emission trends, such as China, are not included. Moreover, even if all emitters were included, the 5 per cent reduction goal remains insignificantly small compared to the substantial emission cuts of up to 85 per cent required for stabilizing emission concentrations at 450ppm between 2100 and 2150.⁵⁷

In addition to these shortcomings come loopholes in the design of the Protocol which further reduce the effectiveness of the regime. Because developing countries are not bound by reduction targets, there is the danger that these countries omit implementing climate policies and respective laws, a result which is often referred to as 'free-riding'. The absence of stringent environmental regulation could lead to so called 'pollution havens', an accumulation of highly emitting industries in non-capped countries. It also may become economically feasible for companies from countries with emission reduction targets to relocate to non-capped countries.⁵⁸ Such 'carbon leakage' affects the environmental integrity of the climate regime by increasing overall greenhouse gas emissions.

Even more, so far there is no indication that those countries which have committed themselves to greenhouse gas reduction targets are complying with their obligation. One reason for this is missing political willingness and fear of losing economic competitiveness to those States that have no emission reduction obligation. Another reason is linked to the weakness of the compliance mechanism established under the Protocol. Non-compliance with the emission reduction obligations can be met by hard sanctions imposed by the Enforcement Branch of the Compliance Committee.⁵⁹ If the Enforcement Branch has determined that a party is not in compliance with its emission reduction commitment under Article 3.1 of the Kyoto Protocol it shall – inter alia – deduce from this party's assigned amount in the second commitment period a number of tonnes equal to 1.3 times the amount in tonnes of excess emissions. Yet, while such hard enforcement measure would

56 Article 3 Kyoto Protocol.

57 See IPCC, AR 4, WGIII, *Summary for Policymakers*, at 15.

58 For an assessment of heavy industry's vulnerability to carbon leakage, see: Reinaud, J., *Competitiveness and Carbon Leakage – Focus on Heavy Industry*, International Energy Agency Information paper, OECD/IEA, October 2008.

59 For an overview over the Kyoto Protocol compliance system see: Schram Stokke, O., Hovi, J. and Ulfstein, G., *Implementing the Climate Regime-International Compliance*, Earthscan, 2005.

sanction non-compliance,⁶⁰ its teeth are lacking because there is to date no successive agreement to the Kyoto Protocol and thus no second commitment period.

This links to the final, major shortcoming of the present climate regime with regard to preventing climate change impacts from becoming a threat to international peace: the missing post 2012 agreement. The international climate negotiations are expected to lead to a new global agreement by the end of 2009.⁶¹ While expectations are high, the stakes for failure are so as well. The complexity of the negotiations is historically unparalleled. The significant reduction cuts required to stop global warming at 2 degrees centigrade need to be met in a relatively short time period (until 2050). They can only be met if all major emitters are included. This demands differentiation of commitment between developed and developing countries and among developing countries, who are no homogenous group. Finding effective and equitable differentiation criteria, however, proves to be a major challenge.⁶² Moreover, future commitments by developing countries will depend on compliance of Annex I States with their Kyoto Protocol targets⁶³ and on their readiness to pay for significant emission cuts in developing countries.⁶⁴ As said above, little indicates that Annex I countries have made demonstrable progress in this direction. Demands for financial and technology transfers to the developing world (i.e. to countries, like China, which are already seen as economic competitors), financing of adaptation to climate impacts which will happen despite any mitigation action and concerns about international competitiveness of affected industries are only adding to the complexity of the negotiations. International climate negotiations show that States still negotiate in their economic self-interest without recognizing the fact that avoiding dangerous climate change mitigation is in every state's self interest.

These short-comings of the present climate regime (and the fact that steep emission cuts are necessary in a very short time frame) indicate the need for external measures, such as those that can be imposed by the Security Council, for 'putting

60 See Ulfstein, G., and Werksman, J., 'The Kyoto Compliance System: Towards Hard Enforcement' in: Schram Stokke et al., 2005, at 54-55.

61 Decision 1/CP.13 (FCCC/CP/2007/6/Add. 1) Bali Action Plan. Also: The Road to Copenhagen Initiative, information available at: http://unfccc.int/files/press/backgrounders/application/pdf/the_road_to_copenhagen.pdf.

62 Rajamani, L., 'Differentiation in the Post-2012 Climate Regime' 4(4) *Policy Quarterly* 48 (November 2008).

63 Article 3 UNFCCC ('developed country Parties should take the lead in combating climate change and the adverse effects thereof') and Article 4.7 UNFCCC ('The extent to which developing country Parties will effectively implement their commitments ... will depend on the effective implementation by developed country Parties of their commitments ...').

64 Chinese Premier Wen Jiabao said rich nations must abandon their "unsustainable lifestyle" to fight climate change and expand help to poor nations bearing the brunt of worsening droughts and rising sea levels. Specifically, he suggested that wealthy nations should divert as much as 1 % of their GDP to help developing nations tackle climate change. See: Reuters 'China tells rich nations to pay up on climate change', *New Scientist*, 7 November 2008. For a discussion of India and China's climate policy expectations of developed nations see: Rajamani, L., 'China and India on Climate Change and Development', in: Bernstein, Brunnée, Duff and Green (eds.) *A Globally Integrated Climate Policy for Canada* (University of Toronto Press, 2008) at 104.

the world on the right track'. This is not to say that we can do away with multilateral climate treaties. A strong and efficient climate regime is urgently needed to tackle the roots of the problem.⁶⁵ Yet, in order to 'push and pull' States to the negotiation table – and an effective climate agreement – the Security Council could be assigned a more active role.

V. UN Security Council Competences with Respect to Preventing Dangerous Climate Change

As we have explored in the previous paragraphs, the UN Charter provides the Security Council with clear legal authority to respond to climate change related threats to international peace and security. Chapter VII of the UN Charter opens for measures to prevent dangerous climate change. According to Article 39 UN Charter, action taken by the Council in response to a 'threat to the peace, breach of the peace or act of aggression' must aim 'to maintain or restore international peace and security'. The term 'maintain' serves to emphasize the fact that the Council can take preventive actions and does not need to wait for the peace to be disturbed before taking action. More challenging than the question of the legal authority of the Council to respond to climate change is the question of what would be effective actions for the Security Council to take.⁶⁶

In the following we will assess some of the possible actions of the Security Council to address the causes of climate change. From this assessment the possibility of use of force is omitted.⁶⁷ The reason for this omission is based on the understanding that use of military force to counter climate change related threats would be in stark contrast to the general spirit of cooperation and peaceful settlement of disputes that informs public international law in general and international environmental law in particular.⁶⁸

A. Coercive Measures

If according to Article 39 UN Charter the determination of a 'threat to peace' has been made, several options are available to the UN Security Council. We will briefly examine (i) the Council's competences to impose targeted sanctions and suspension

65 See Sindico, F., 'Ex-Post and Ex-Ante [Legal] Approaches to Climate Change Threats to the International Community', *New Zealand Journal for Environmental Law* Vol. 9 (2005) at 209–238.

66 Resolution 1625 (2005) expressed the determination of the Council to enhance the effectiveness of the United Nations in preventing conflict. UN Security Council Resolution 1625 (2005), adopted on 14 September 2005. S/RES/1625 (2005).

67 See for a discussion of this possibility with regard to environmental security the chapter by Fauchald and Stigen in this book.

68 International environmental law is based on the idea that environmental threats are best met by cooperative multilateral responses. Principle 7 of the 1992 Rio Declaration states that 'States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystems' and Principle 26 demands accordingly that 'States shall resolve all their environmental disputes peacefully'.

of diplomatic ties (Article 41), (ii) the legislative competences in response to an identified threat, and (iii) the possibility to condemn certain action or inaction by states.

i. Sanctions and Suspension of Diplomatic Relations

Article 41 opens for binding economic or political coercive measures, such as the complete or partial interruption of economic relations, of various means of communication and the severance of diplomatic relations. Such sanctions could be imposed in very short time and are thus of importance to halt environmental threats, such as dangerous climate change, where time is running out. Article 41 measures could be used to compel states to take certain actions. So could, for example, states with high GHG emission records be targeted with the aim of forcing them to constructively negotiate an international climate accord or to implement effective domestic emission reduction measures in compliance with an existing treaty or customary obligation. Economic sanctions, such as freezing of funds, blocking of financial operations, or imposition of embargoes of imports and exports, would put political as well as economic pressure on these states, when exposing their destructive behaviour to the international community. The political embarrassment that comes with being the addressee of a Security Council sanction combined with the message that the international community will not tolerate the state's contribution to a threat to peace might exert a strong force on the targeted state/states. More specifically, *Knight* suggests that the Security Council under Article 41 could impose targeted sanctions against all states exporting products that are created or extracted using a particular environmentally harmful practice.⁶⁹ Such suggestion might become particularly relevant in preventing dangerous climate change by attempting to address specifically climate-damaging activities, such as clear cutting of forested areas with a high carbon intake or highly emitting industrial activities. *Knight* notes that 'Countries who continually impose negative externalities on a regional or global scale might be induced to reform their practices, come to the negotiation table, or abide by existing treaties if the spectre of the Security Council's enforcement power were looming overhead.'⁷⁰

Moreover, targeted sanctions could be imposed on individuals and private entities which are considered by the Council a threat to global security and peace.⁷¹ The Security Council's sanctions after September 11 is not directed solely toward member states, but also against individuals and private entities. The concept of targeted sanctions as an alternative to embargoes and other kinds of state sanctions is fairly new. Targeted sanctions are intended to impact directly on leaders, political elites, and segments of society believed responsible for objectionable behaviour, while reducing

69 See also *Knight*, supra note 28, 1561–1563.

70 *Ibid*, at 1562.

71 See, for example, S/RES/1390 (2002) imposing travel bans on individuals associated with Al-Qaida and the Taliban, S/RES/1737 (2006) imposing targeted financial sanctions on individuals associated with Iran's nuclear program, and S/RES/1718 (2006) imposing targeted financial sanctions and travel bans on individuals associated with Korea's nuclear program.

collateral damage to the general population and third countries.⁷² This development marks a stark difference from the Security Council's previous practice.⁷³ Yet, in a climate context, sanctions targeted on private entities might be an effective means to stop particularly damaging activities, where the state can't or won't act. Most emissions of greenhouse gases are the result of industrial activities by private companies. The Council could, for example, target national or multinational companies that emit high amounts of GHG during production processes or are responsible for the massive destruction of forested areas via, for example, the imposition of import or export bans.⁷⁴

ii. 'Legislative' Competences

Another way of attempting to prevent the threat of climate change related threats from realizing are Security Council measures that require all states to take or omit certain actions. Fairly recently, the Council has commenced to address security threats not confined to a particular country, time and geographical location. Resolution 1373 (2001)⁷⁵ on terrorism and Resolution 1540 (2004)⁷⁶ on weapons of mass destruction identified threats to peace and required *all* states to take or not to take certain actions.

In Resolution 1371 (2001) the Security Council laid down a set of stringent obligations for all states concerning steps that they must take within their domestic legal system to prevent and repress terrorism. The Council *de facto* legislated on national action against terrorism.⁷⁷ Resolution 1540 (2004) contained explicit non-proliferation obligations to all states, regardless of their membership to existing multilateral treaties addressing the issue of prohibition of weapons of mass destruction.⁷⁸

72 See Fitzgerald, 'Managing Smart Sanctions Against Terrorism Wisely', 36 *New England Law Review* (2002) at 957.

73 For a critical discussion of sanctions targeted at private entities, see Zemanek, K., 'Is the Security Council the Sole Judge of its Own Legality? A Re-Examination' in: Reinisch A., and Kriebaum U., (eds.) *The Law of International Relations – Liber Amicorum Hanspeter Neuhold* (Eleven International Publishing, 2007) at 484–489; and Fassbender, B., *Targeted Sanctions and Due Process*, Study commissioned by the United Nations Office of Legal Affairs, Humboldt-Universität zu Berlin 2006.

74 Examples of such commodity bans are diamond and timber bans, S/RES/1521 (2003). Other targeted sanctions on corporate entities could include financial, travel, aviation, arms and commodities restrictions with the objective of applying coercive pressure on transgressing companies and entities that support them.

75 S/RES/1373 (2001), adopted on 28 September 2001.

76 S/RES/1450 (2004), adopted on 28 April 2004.

77 Cassese, 2005, at 468.

78 The Security Council required *inter alia* of member states to refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery; to adopt and enforce appropriate effective laws in this respect. It further required States to take and enforce effective measures to establish domestic controls to prevent the proliferation of weapons of mass destruction, for example, border controls and national export and trans-shipment controls. This includes appropriate laws and

In addition, under both resolutions committees were established to monitor the implementation of the resolutions and the fulfilment of those obligations. Both committees were to receive reports from states on their implementation of the resolutions. The mandate of both Committees was subsequently extended by later resolutions.

This new legislative approach adopted by the Security Council has been met with criticism. Concerns were raised that the Council may be acting *ultra vires*.⁷⁹ Others argue that in passing legislative resolutions the Council was upsetting the balance of power between the Security Council and the General Assembly and weakening the fundamental principles of sovereign equality and consent in international law.⁸⁰

Yet, council legislation of this kind could play a potential role in addressing climate change related threats. The Council could require of all UN Members the implementation of immediate, effective mandatory climate change mitigation measures. In order to monitor the implementation of and the compliance with those obligations, the Security Council could cooperate with existing UN bodies under the present international climate regime. The UNFCCC Secretariat and the Compliance Committee under the Kyoto Protocol could, for example, continue to play important roles with respect to monitoring and reporting requirements of Members States and facilitating implementation of climate change mitigation obligations.⁸¹ Moreover, in order to gain the necessary technical knowledge and capacity, it would be advisable that the Security Council sets up a special committee on climate change matters, which could require periodic state reporting on legislative implementation and actual emission reductions. Such 'Climate Security Committee' could work in conjunction with other bodies to set the standards and establish and to monitor compliance with those standards.⁸²

In spite of almost two decades of international diplomacy on climate change no international agreement adequate to the significant mitigation task has been produced. Urgent and strong mitigation action is of the essence in relation to climate change. In this context it was suggested that '[W]hat is needed is an investment internationally of political imagination ... [T]he window of opportunity is rapidly

regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation. It also called for establishing end-user controls and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations.

79 So Joyner, D., 'Non-proliferation Law and the United Nations System: Resolution 1540 and the Limits of the Power of the Security Council' 20 *Leiden Journal of International Law* (2007) at 489.

80 See for a discussion: Rosand, E., 'The Security Council as "Global Legislator": *Ultra Vires* or *Ultra Innovative*?' 28 *Fordham International Law Journal* 542 (2004-2005) at 544.

81 See Sindico, 2005, at 226-229.

82 See discussion in Penny, Ch.K., 'Greening the security council: climate change as an emerging "threat to international peace and security"' 7 *International Environmental Agreements* 35 (2007), at 61. Penny suggests an 'Environmental Security Council' as a subsidiary body of the UN Security Council. He notes that such a committee 'could even be vested with the binding legal authority and practical capacity necessary to conduct intrusive examinations on the territory of particular states to monitor their compliance', at 61.

closing.⁸³ Because with regard to climate change the dilemma is time connected – the longer the delay, the more extreme the response that will be needed – effective and immediate action could be triggered by a ‘legislative’ Security Council resolution.

B. *Condemnations*

A further, though less coercive, means to gather international momentum behind climate change mitigation action are condemnations of certain state behaviour or inaction with regard to climate change mitigation without imposing sanctions or requiring specific measures to be taken. While arguably condemnations lack teeth compared to the two previously mentioned alternatives of Security Council action, they are important means to bring climate related threats to the attention of the international community. The Security Council could, for example, condemn ‘the massive pollution of the atmosphere’ and express the clear link to a threat to peace and security.⁸⁴ Such measure may heighten state concern for climate change and exert a deterrent effect with regard to continuing destructive behaviour. Moreover, treating climate change as a security issue in this way may clear the road for more constructive state action for meeting the climate challenge. Although mere condemnation does not have any binding effect, the public exposure as such could as well impress upon the delinquent state or states and may eventually lead to discontinuation of the deviant behaviour. States increasingly endeavour to avoid public strictures, such as being the target of repeated moral chastisements.⁸⁵ Condemnations pronounced by the Security Council could magnify the gravity of climate related threats and the need to respond to these threats effectively and urgently in a collective way.

C. *Request to the International Court of Justice*

One final avenue open to the Security Council, which has not been discussed in any detail in legal literature, is the possibility to engage in international adjudication. The Security Council has the competence to seek an advisory opinion from the International Court of Justice on any question of international law.⁸⁶ Possible legal questions that the Security Council might ask could relate to the legal consequences for states that are not complying with their obligations under the UNFCCC or the Kyoto Protocol. As mentioned above, the prospect of a number of Annex B States not complying with their quantified emission reduction targets is increasing. While no post-Kyoto agreement is in place yet, the enforcement measures that could be employed by the Compliance Committees’ Enforcement Branch remain without coercive force. Yet, an advisory opinion on the consequences of non-compliance,

83 John Ashton, ‘World’s most wanted: climate change’ *BBC News Viewpoint*. <http://www.newsvote.bbc.co.uk/mpapps/pagetools/print/news.bbc.co.uk>.

84 This would be similar to Security Council condemnations of the use of force: see for example S/RES1177 (1998) and S/RES/1227 (1999).

85 See Cassese, 2005, at 343.

86 Article 65 Statute of the International Court of Justice and Article 96.1 UN Charter.

breach of a treaty obligation and the possibility of imposing countermeasures⁸⁷ might be a means of deterring states from non-compliance. Other legal questions, which the Security Council might request the International Court of Justice to answer, could concern the legality of a massive pollution of the atmosphere by the emissions of greenhouse gases or the legality of causing significant damage to the stability of the global climate system, including the liability for compensating resulting harm to people and ecosystems. Such requests would be in line with the UNGA and WHO requests for an advisory opinion on the *Legality of the Threat or Use of Nuclear Weapons*.⁸⁸ The ICJ could further be requested to answer the contentious question about the status of the no-harm rule in international law in the context of causing dangerous climate change or the status of rights established under the UN climate regime.⁸⁹

Although advisory opinions of the International Court of Justice are not binding in law upon the requesting body, they arguably carry just as much authority as a judgement in interstate proceedings.⁹⁰ Making use of advisory opinions would be an adequate means for the Security Council for drawing international attention to the dangers of climate change and the legality or illegality of states actions or inactions in effectively addressing it.

VI. Conclusion

In this chapter we found that climate change impacts have the potential to amount to a threat to peace in the normative sense entailed in Article 39 of the UN Charter. Such determination is, however, subject to the discretion of the Security Council. Yet, no legal obstacles exist that would prevent the Council from linking climate change to a security issue.

We found that various options exist for the Security Council to act once a determination in this respect has been made. These options include the imposition of economic or political sanctions or the severance of diplomatic bonds according to Article 41 UN Charter. Further, in line with recent developments the Council could fill the gaps left by the current climate change regime. As was highlighted in part 4, the current multilateral treaty regime falls short of providing an effective and timely remedy to climate change related threats as it is – per today – unable to compel states to mitigate dangerous global climate change. The Security Council could thus adopt a binding 'legislating' resolution, which demands of all States adequate, effective

87 For a discussion of the relationship between non-compliance and the general law on state responsibility, see: Koskenniemi, M., 'Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol' 3 *Yearbook of International Environmental Law* (1992) at 123–163; and Fitzmaurice, M.A. and Redgwell, C., *Environmental Non-Compliance Procedures and International Law* 31 Netherlands Yearbook of International Law (2000) at 35–65.

88 *Advisory Opinion Concerning the Legality of the Threat or Use of Nuclear Weapons*, ICJ Reports (1996) 66 and 226.

89 See Sands, P., *Principles of International Environmental Law*, 2nd edition, CUP, 2005, at 189 and 212 ff.

90 Birnie and Boyle, 2002, at 222.

and immediate climate change mitigation action. A weaker form of coercion would be condemnations by the Security Council of certain actions or inactions of states with regard to mitigating climate change. Finally we found that the Security Council could raise international awareness of the legal implications of climate related state behaviour by requesting the International Court of Justice to give an advisory opinion on that matter.

The Security Council possesses sufficient legal authority to address climate change. Whether or not the Council will make such a determination and consequently act in order to effectively address the challenges posed by climate change depends on the political will of individual Council members. In order for the Security Council to make a decision on non-procedural matters an affirmative vote of nine members including the concurring votes of the permanent members is required.⁹¹ In particular the votes of the P5 are of decisive importance and build the main obstacle. Not only would the US need to dramatically alter its position on climate change; the US would also need to come to some political arrangement with China and Russia on the issue. Complicating in this context is the fact that the US and China not only view each other as economic competitors, they are also engaged in competition for access to the world's remaining oil resources.⁹² It can only be hoped that in the nearest future China and the US abandon their divergent views of the nature of the action needed to address climate change and to find a way to collaborate on the expansion of alternative energy technologies.

Reform of the Council's decision making procedures may be another means for overcoming political obstacles. Discussions around this issue have been contentious for a long time.⁹³ There certainly is room for improvement of decision making procedures in the Security Council. The urgency and importance of the task may help to overcome existing shortcomings and obstacles. Yet, the crucial issue is whether there is enough time for such reform. With regard to preventing dangerous climate change the answer is probably to the negative.

Much therefore depends on creating political consensus. The political obstacles are not insurmountable. When facing the dangerous impacts of climate change, the P5 may be able to overcome their political differences and consent to taking action. Such leadership role adopted by the Security Council might be exactly what is needed for facilitating the far-reaching global changes necessary to mitigate and adapt to what might well be the greatest global threat of the twenty-first century. It is also a unique chance to address the complex and interlinked challenges of poverty, climate change and political instability through the promotion of globally sustainable development.⁹⁴ Rather than despair and confrontation, this situation warrants, in the words of UN Secretary General Ban Ki-moon, 'a perspective of cautious but resolute optimism.'⁹⁵

91 Article 27.3 UN Charter.

92 See, Leverett, F., and Bader, J. 'Managing China-US Energy Competition in the Middle East', 29 *The Washington Quarterly* (2005–2006) at 187.

93 For an overview, see: Penny, 2007, at 62–68.

94 See, Voigt, C., 'Sustainable Security', 19 *Yearbook of International Environmental Law* 2008 (forthcoming in 2010).

95 Ban Ki-moon, 'The Right War', *Time*, 16 April 2008.