A Climate Security Initiative: Another Way to Make International Climate Law

By Ashley Murphy[1]

I. Introduction

In light of the recent findings from the Mauna Loa Observatory that the concentration of CO_2 in the atmosphere is continuing to increase, we must accept the conventional processes of international law have failed to find a solution to the intensifying climate change threat.[2] International law has been directed towards the problem since the inception of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. Since then the Kyoto Protocol has been introduced, its failure eventually leading to the Paris Agreement of 2015. The stark reality is that nearly four years after the introduction of the latest iteration of international climate law we are still witnessing an abject inability to halt global emissions. In the context of climate change the limitations more than the positives of international law have been exposed.

The challenge from climate change is so urgent that we must look for an alternative means in which to generate some semblance of an immediate fight back.[3] This is broadly the same rallying call Sir Geoffrey Palmer made in 1992 when he sought to find new ways to make international environmental law.[4] It is the argument here that in the context of the ordinary instruments of international law failing, we must find new ways to craft international climate law (ICL). One possibility found in the history of international security is the option to introduce a framework of principles outside the usual constraints of conventions. The prototype for this idea comes from the non-proliferation of nuclear weapons field, where the Proliferation Security Initiative (PSI) was introduced as an extraordinary means in which to generate a quick and effective response to the proliferation activities of non-state actors. The introduction and success of the PSI offers a blueprint for the climate change response agenda, and so it is argued here that a Climate Security Initiative (CSI) provides a useful and timely alternative that must be explored.

This paper intends to strike a practical tone and focus on the possibility of a CSI being introduced as soon as possible. By exploring this option it is the intention of this paper to provide policy makers and those willing states a means in which to pursue a more robust climate response agenda. The paper is structured according to three main questions: has international climate law failed; what model of response and benefit does the PSI offer; how could a CSI be created to fill the gaps left by international climate law.

---

1 Lecturer in International and Environmental Law, University of Chester, United Kingdom. Email: ashley.murphy @chester.ac.uk.

2 Mauna Loa Observatory, 'Daily CO2' (Mauna Loa Observatory Hawaii, 15th May 2019) <https://www.co2.earth/daily-co2> accessed 14th October 2019.

3 IPCC Report, 'Global Warming of 1.5 °C: Summary for Policy Makers' (8th October 2018).

4 G Palmer, 'New Ways to Make International Environmental Law' (1992) 86 (2) The American Journal of International Law 259.

II. International Climate Law

To analyse the success or failure of an international regime it has to be decided by what standard of effectiveness it would be judged. Crucially different standards lead to different results.[5] The typical standards of effectiveness identified by Oran Young include: legal, behavioural and problem solving.[6] Sometimes referred to as: output, outcome, and impact.[7] The legal standard refers to the extent that an environmental problem can be transferred into a legal regime with normative character. Adoption of the legal standard alone implies an element of belief that the law matters in its own right, a point that is subject to debate.[8] The behavioural standard regards the ability of a regime to alter the behaviour of those subjected to it, in the achievement of its stated objective. This does provide a more comprehensive measure than the legal standard as it focuses on a greater level of impact beyond simple legal recognition.[9] However it is premised on the notion that the behaviour mandated by the regime is significant in its connection to the regime's objective, which is not a consistent reality.[10] The problem-solving standard extends the link between the regime and the actual problem being addressed, considering if a tangible improvement is evident. The application of this standard is particularly useful in the climate context, which experiences political and bureaucratic obstacles that project a veneer of progress with questionable impacts on the problem.[11]

It is a matter of choice as to which of these three standards of assessment are adopted. Subsequently, politicians around the world are able to claim they are not only partaking in ICL but also that it is successful, inevitably relying on the legal standard.[12] However, what is the point in declaring that ICL exists and that the Paris Agreement has 195 members when at the same time CO_2 emissions continue to rise, biospheres continue to alter, and extreme whether events

5 H Breitmeier, A Underdal, O Young, 'The Effectiveness of International Environmental Regimes: Comparing and Contrasting Findings from Quantitative Research' (2011) 13 International Studies Review 579.

6 oung actually identifies six standards but it is these three that have been utilised in the literature, O Young, *International Governance: Protecting the Environment in a Stateless Society* (1st edn, Cornell University Press, 1994) Ch.6.

7 J Vollenweider, 'The effectiveness of international environmental agreements' (2013) 13 International Environmental Agreements 343.

8 Brunnee and Toope argue that law matters through its influence on regime evolution, as opposed to its legal nature solely: J Brunnee, S Toope, 'The Changing Nile Basin Regime: Does Law Matter?' (2002) 43 (1) Harvard International Law Journal 105.

9 See for a study focussing on the behavioural standard, J Wettestad, 'Designing Effective Environmental Regimes: The Conditional Keys' (2001) 7 (3) Global Governance 371.

10 For instance under the Kyoto Protocol Russia agreed a 5% reduction in its emissions by 2015, but this was not based on a motivation to alter behaviour towards this target but on the reality of an industrial decline that produced the reduction incidentally.

11 O Young, 'Effectiveness of international environmental regimes: Existing knowledge, cutting edge themes, and research strategies' (2011) 108 (50) PNAS 19853.

12 Brazil has pointed to its commitment to the Paris Agreement, expressing a level of legal effectiveness without making behavioural changes or addressing the problem, M Darby, 'Bolsonaro says Brazil will stay in the Paris Agreement' (Climate Home News, 26th October 2018) <https://www.climatechangenews.com/2018/10/26/bolsonaro-says-brazil-will-stay-paris-agreement/> accessed 28th August 2019; In 2015 David Cameron then Prime Minister of the UK said 'What do we tell our grand children if we fail to agree on a deal', indicating clearly his belief in the legal standard: A Vaughan, E Howard, A Holpuch, 'World Leaders Call for Action at Paris Climate Talks' *The Guardian* (London 30th November 2015) <www.theguardian.com/environment/blog/live/2015/nov/30/paris-climate-summit-world-leaders-meet-for-opening-day-live> accessed 14th July 2019.

become less extreme by virtue of their increasing frequency.[13] The only standard of effectiveness that really matters in this time of urgency is the problem-solving one. To solidify this claim, if we apply the legal standard then the Paris Agreement is a resounding success. Going further, the behavioural standard is also largely satisfied as many states have made minor efforts and submitted their Intended Nationally Determined Contributions to the secretariat.[14] Yet, the reality is emissions are continuing to rise and climate change is becoming an ever more severe threat.[15] Accordingly ICL must be judged to have failed in the pursuit of a response that is able to stem the problem of climate change. The remainder of this section will consider ICL and its level of failure according to the problem-solving standard.

If we consider ICL to have begun with the UNFCCC in 1992 then we have this convention plus the Kyoto Protocol and Paris Agreement to examine. However this paper does not need to rehash an analysis of the UNFCCC in great detail.[16] Suffice to say the framework was a useful starting point and brought states to the table in the recognition of a common problem. Its character as aspirational and absent any imposing obligations meant that its tone was largely discretionary and best encapsulated by the principle of common but differentiated responsibilities.[17] The UNFCCC contains the potential tools and processes for much more detailed responses and cooperative ventures. Yet with hindsight we can see the framework instead of acting as a tentative beginning leading to a more robust set of conventions, acted to create an atmosphere of individualism propagated by the notions of blame and responsibility.[18]

The Kyoto Protocol did attempt to lead the UNFCCC forward through the introduction of defined targets. Had it been successful the Protocol would have resulted in firm emission reductions, meaning it was in fact an example of hard or good law.[19] Nevertheless, the attitudes present at the founding of the UNFCCC were transplanted firmly into the Protocol and discord over the differentiated response model was rife. The USA signed the Protocol but failed to ratify it with then President George Bush citing the reason for this as inequity among states.[20] Other significant emitters like India and China did not take the Protocol seriously enough and so although the American position is vastly unhelpful it was perhaps predictable. Russia and Australia also

13 D Easterling et. al., 'Observed Variability and Trends in Extreme Climate Events: A Brief Review' (2000) 81 Bulletin of the American Meteorological Society 417.

14 G Peters et. al., 'Key indicators to track current progress and future ambition of the Paris Agreement' (2017) 7 Nature 118.

15 T Radford, 'Human carbon emissions to rise in 2019' (Climate News Network, 31st January 2019) <https://climatenewsnetwork.net/human-carbon-emissions-to-rise-in-2019/> accessed 14th July 2019.

16 Singleton-Cambage makes the point that the UNFCCC took too long and was likely out of step with the scope of the problem by the time it was in force, K Singleton-Cambage, 'International Legal Sources and Environmental Crises: The Inadequacy of Principles, Treaty, and Custom' (1996) 2 ILSA Journal of International and Comparative Law 171; E Rowbotham, 'Legal Obligations and Uncertainties in the Climate Change Convention' in O'Riordan and J Jager (eds) Politics of climate change: a European Perspective (1st edition, Routledge, 1996) 32.

17 United Nations Framework Convention On Climate Change (adopted 9th May 1992, entered into force 21st March 1994) 1771 UNTS 107, Article 3.

18 These arguments engulf the climate change debate, see: M Paterson, M Grubb, 'The international politics of climate change' (1992) 68 International Affairs 293.

19 Kyoto Protocol to The United Nations Framework Convention on Climate Change (adopted 11th Dec 1997, entered into force 16th Feb 2005) UN Doc FCCC/CP/1997/7/Add 1, Article 3.

20 G Bush, White House Archives (White House Archives 16th April 2008) <https://georgewbush-whitehouse.archives.gov/news/releases/2008/04/20080416-6.html> accessed 15th July 2019.

managed to manipulate the Protocol with the former using economic downturn to set and meet reduction targets,[21] and the latter negotiating an increase in emissions.[22] Perhaps the Protocol's most damning assessment comes from the fact its successor the Paris Agreement exists and in a very different guise.

The Paris Agreement does not set any emission reduction targets for states. Instead Article 2 leads with the broad objective to prevent a 2°C temperature increase above pre-industrial levels.[23] Immediately the Agreement dampens its impression because within Article 2 the aspiration is noted to keep temperature increases below 1.5°C, 'recognizing that this would significantly reduce the risks and impacts of climate change'.[24] If 1.5°C is the figure that must act as the ceiling why not focus on this? The 2°C figure seems redundant except for the fact that states were even in this broad aspiration unprepared to commit to the more stringent objective. Without clarity as to the objective being sought the Agreement loses some of its impetus. In the wider sphere of global communication the clarity of message is vital, and the Paris Agreement is unable to set a clear tone right from the start, or rather the tone is perfectly clear in that states were not prepared to agree the type of convention required to stem the problem.

The Agreement takes an early deviation from the hard law of the Protocol by stating that it will be predicated on the principle of 'common but differentiated responsibilities and respective capability, in the light of different national circumstances'.[25] There is of course a solid foundation for this approach, some states are infinitely more developed than others, and consequently responsible for climate change, and so efforts at emission reduction should to some extent reflect this. However this provision is too vague giving those developed states a free pass to avoid robust climate actions. Instead it should have cast them into leadership roles tackling climate change from the front. Some would argue this type of commitment placed on the developed world would have been an example of neo-liberalism[26] and maybe neo-colonialism.[27] This is a negative interpretation and is just one way to characterise such action. The fact remains leadership, technology sharing, and capacity development are not neo-colonial activities but should be characterised as the actions of responsible states accepting their part in what is now a vital response to a pending global catastrophe.

Nevertheless, the common but differentiated response model prevailed through the inclusion of Intended Nationally Determined Contributions (INDCs).[28] Examining the INDC model revels the extent to which the Paris Agreement is failing. Evidence is now starting to appear that the cumulative total of actual emission reductions from INDCs is not able to equate to a global effort

---

21 B Chambers, 'Towards an Improved Understanding of Legal Effectiveness of International Environmental Treaties' (2004) 16 (1) The George Town International Environmental Law Review 501.

22 B Bolin, 'The Kyoto Negotiations on Climate Change: A Science Perspective' (1998) 279 Science 330.

23 Paris Agreement to The United Nations Framework Convention on Climate Change (adopted 12th Dec 2015) UN Doc FCCC/CP/2015/L.9/Rev.1, Article 2.

24 Ibid. Article 2 (a).

25 Ibid. Article 2 (2).

26 D Hursh, J Henderson, D Greenwood, 'Environmental education in a neoliberal climate' (2015) 21 Environmental Education Research 299.

27 H Bachram, 'Climate Fraud and Carbon Colonialism: The New Trade in Greenhouse Gases' (2004) 15 Capitalism Nature Socialism 5; J Dehm, 'Carbon Colonialism or Climate Justice? Interrogating the International Climate Regime from a TWAIL Perspective' (2016) 33 Windsor Yearbook of Access to Justice 129.

28 Paris Agreement to The United Nations Framework Convention on Climate Change (adopted 12th Dec 2015) UN Doc FCCC/CP/2015/L.9/Rev.1, Article 4.

capable of resulting in the 2°C aspiration.[29] This means that even if each INDC is upheld the overall objective of the Paris Agreement will not be achieved. States have chosen to submit INDC documents that are not significantly robust in terms of problem solving; instead they reflect efforts that do not interfere with their other priorities, predominantly perpetual economic growth. To exemplify this point the following paragraphs will examine some INDCs.

The EU communicated a combined INDC document committing to a 'binding target of an at least 40% domestic reduction in greenhouse gas emissions by 2030 compared to 1990 levels.'[30] Firstly, the 40% reduction is not ambitious particularly considering that some of the most developed economies and technologically capable are members of the EU. Hof and others who provided comparative data to argue that from a historical responsibility perspective the EU target is less ambitious than India, Mexico and Brazil best illustrate this point.[31] Secondly, the INDC document references its past ambition of a 20% reduction, which is used to justify the 40% figure and show an improved effort. However all this does is seek to show the EU has a history of adopting non-ambitious targets. The EU has put together a domestic target that would if reflected around the world not meet the 2°C ambition.[32]

Looking at Brazil as a comparator to the EU, its INDC document introduces a 37% emission reduction below 2005 levels.[33] This figure is comparable to the EU and might, considering the history of Brazil, be thought of as ambitious. However its achievement was premised not on a reduction of emissions but on a cutback in deforestation and a commitment to restore 12 million hectares of rainforest.[34] The problem with this is the alteration of the Brazilian Government that has seen the election of Jair Bolsanaro, an advocate of development at the expense of the Amazon rainforest.[35] The basis on which the INDC is built has been undermined and so Brazil is unlikely to post significant results that are able to match its commitment.[36] Thus highlighting the problem of discretion based agreements, which offer no consistency in the face of changing domestic or political conditions.

The Australian INDC begins by referring to its 'strong record' where climate commitments are concerned.[37] Yet this strong record is reflected through a 26–28% emission reduction target, which is noticeably low for one of the wealthiest and most developed states in the world. The basis for this

29 Climate Action Tracker, 'CAT Emissions Gaps' (Countries, June 2019) <https://climateactiontracker.org/global/cat-emissions-gaps/> accessed 28th August 2019.

30 Intended Nationally Determined Contribution of the EU and its Members States, Article 3.

31 F Hof, M den Elzen, A Mendoza Beltran, 'The EU 40% greenhouse gas emissions reduction target by 2030 in perspective' (2016) 16 International Environmental Agreements: Politics, Law and Economics 375.

32 Climate Action Tracker, 'EU' (Countries, June 2019) <https://climateactiontracker.org/countries/eu/> accessed 15th August 2019.

33 Federative Republic of Brazil: Intended Nationally Determined Contribution, para 5.

34 Federative Republic of Brazil: Additional Information on the INDC for Clarification Purposes Only, para 14.

35 A Murphy, 'Jair Bolsonaro wants to deforest the Amazon – what powers does the UN have to stop him? (The Conversation, 12th July 2019) <https://theconversation.com/jair-bolsonaro-wants-to-deforest-the-amazon-what-powers-does-the-un-have-to-stop-him-120154> accessed 30th October 2019.

36 P Rochedo, et al., 'The threat of political bargaining to climate mitigation in Brazil' (July 2018) Nature <https://www.nature.com/articles/s41558-018-0213-y> accessed 16th August 2019.

37 Australia's Intended Nationally Determined Contribution to a new Climate Change Agreement (August 2015), para 2.

strong record claim and mismatched objective stems from Australia's perspective on global effort that situates its ambition as 'comparable to the targets of other advanced economies'.[38] Hidden behind this statement is a race to the bottom philosophy that reflects the lack of true leadership in the context of climate response. Australia is just one example highlighted that is effectively saying we will commit to this problem only to the extent that our comparable counterparts will commit. Furthermore, the Climate Action Tracker finds that Australia is likely to overshoot its target significantly.[39]

The Canadian INDC offers to cut 'greenhouse gas emissions by 30% below 2005 levels by 2030'.[40] The INDC twice says that this 'target is ambitious but achievable'.[41] Yet the level of ambition attached is unconvincing. The first problem is that 30% is not an overly impressive target, particularly for a developed state. Even compared to the limited number of states examined in this paper, Canada's target is not overly ambitious. Second, Canada chose 2005 and not 1990 as its base year, representing that it has taken the less determined pathway. The inclusion of statements arguing this is an ambitious target therefore appears designed to mask that this is not the case. Nonetheless, the existence of an INDC containing a target allows Canada to claim compliance under the Paris Agreement, granting legal effectiveness. It is not surprising the Climate Action Tracker finds the efforts of Canada would continue to allow a temperature increase between 2°C and 3°C.[42] For this reason the actions of Canada are classified as 'insufficient' in the fight against emissions.[43]

To surmise, ICL is predominantly resting on the Paris Agreement that is based almost exclusively on discretion. The intention behind this was to avoid the problems of the Kyoto Protocol and stimulate greater state involvement. Yet the INDC model found in the Paris Agreement is proving to suffer some historic problems and some new ones. The lack of global leadership in the climate context is striking and significantly stifling the success of ICL. The 2°C aspiration of Paris will not be met and so the problem is not being tackled.[44] If we consider the consequences of climate change are exacerbating daily, and the IPCC has warned the threat must be grasped by 2030, the only position we can embrace is that ICL is not solving the problem of global emissions and alternative options must be explored.[45]

38 Ibid para 6.

39 Climate Action Tracker, 'Australia' (Countries, June 2019). <https://climateactiontracker.org/countries/australia/current-policy-projections/> accessed 15th August 2019.

40 Canada's INDC Submission to the UNFCCC, para 3.

41 Ibid, para 4.

42 Climate Action Tracker, 'Canada' (Countries, June 2019) <https://climateactiontracker.org/countries/canada/> accessed 17th August 2019.

43 Climate Action Tracker, 'Canada' (Germany, June 2019) <https://climateactiontracker.org/countries/canada/> accessed 17th August 2019.

44 Ibid.

45 IPCC Report, 'Global Warming of 1.5 °C: Summary for Policy Makers' (8th October 2018).

III. The Proliferation Security Initiative

As early as the 1960s the international community took steps through the creation and implementation of the Non-Proliferation Treaty (NPT) to ensure nuclear weapons did not become commonly accessible.[46] Attached to weapons of mass destruction (WMDs) is a perception on the part of the international community that they are extraordinary in their capacity to cause destruction.[47] This allowed a rare unity across the international community, perhaps best exemplified by the major powers that even at the height of the Cold War did not resort to using these weapons. To further support the NPT, the UN Security Council adopted Resolution 255 in 1968 to provide signatories the assurances they needed to pursue a non-proliferation agenda.[48] There is very little disagreement that non-proliferation is an important international ambition, it was therefore unsurprising that the proliferation discoveries in the early millennium led to some extraordinary responses.

In 2002 the So San Ship was intercepted on course from the DPRK to Yemen, containing a number of materials related to WMDs and specifically the production of SCUD missiles.[49] The USA interdicted the ship but despite the illicit cargo was unsure of the legal ground on which they were acting, eventually taking the decision to allow the ship to continue on its journey. The involvement of the DPRK was particularly problematic because of its public withdrawal from the NPT,[50] which implicated it as a potential developer and source of WMDs.[51] According to Joyner, the So San incident was an awakening to the realisation that proliferation activities were taking place and 'there was no justification under international law' to prevent their transit, delivery or allow the seizure of such materials.[52] In addition to this international legal gap, the discovery compounded the USA's belief that a nexus was developing between terrorism and proliferation that would challenge its security above all other threats.[53] Accordingly it began work on the PSI that was launched on the 31st May 2003.

The PSI was intended as an immediate response to the realisation that proliferation was taking place despite the NPT. The discovery of the So San Ship and the involvement of a rogue state meant the international community was already running behind the problem and in need of a means to catch up. Conventions are not typically known for their haste. It can take months of challenging negotiations to get a convention adopted, and often only the lowest common denominators are agreed.[54] The international community is comprised of 193 equal states and this has contributed

---

46 Treaty on the Non-Proliferation of Nuclear Weapons (adopted 1st July 1968, entered into force 5th March 1970) 729 UNTS.

47 Debates of the UNSC have shown this unity: UNSC Verbatim Record (31st January 1992) UN Doc/S/PV/3046; UNSC Verbatim Record (19th June 1968) UN Doc/S/PV/1433.

48 UNSC Res 255 (19th June 1968) UN DOC/S/Res/255.

49 D Joyner, 'The Proliferation Security Initiative: Non-proliferation, Counter-proliferation, and International Law' (2005) 30 Yale Journal of International Law 507.

50 UNSC Res 825 (11th May 1993) UN Doc S/Doc/825.

51 J Joseph, 'The Proliferation Security Initiative: Can Interdiction Stop Proliferation?' (2004) 34 Social Science 6.

52 D Joyner, 'The Proliferation Security Initiative: Non-proliferation, Counter-proliferation, and International Law' (2005) 30 Yale Journal of International Law 507, 509.

53 M Valencia, 'The Proliferation Security Initiative: A Glass Half-full' (2007) 37 Arms Control Today 17.

54 G Palmer, 'New Zealand's Defective Law on Climate Change' (2015) 12 New Zealand Journal of Public International Law 115.

to an environment of challenging negotiations and subsequently ineffective agreements.[55] The subject of proliferation is less beset by this problem because of the broad unity on the subject. Yet, even with broad agreement a convention still takes considerable time and conferences are lengthy processes where various priorities are balanced.[56]

The USA and its allies did not wish to see the content of the PSI subjected to negotiation.[57] The problem as they saw it was simple and as such there was a simple set of steps that would address it. The creation of the PSI was undertaken behind closed doors with the intention to maximise efficiency and avoid the traditional obstacles of international law.[58] As the USA was going to operate as the chief police officer of the PSI it saw this as a reason to take on a leadership role and avoid the involvement of too many other states at creation stage.[59] On the 31st May 2003 the PSI was publically launched, presented to the international community not as a draft convention to discuss but as a fully finished initiative that could only be endorsed.[60] It is because of this formulation strategy that the PSI came to life in a relatively short time frame and cut straight to the problem of proliferation. In many respects the PSI offers a model of international cooperation that has significant benefits over the traditional mechanisms of international law.

The creation of the PSI poses some interesting challenges for the meaning of international law. Examining Article 38 of the ICJ Statute, the sources of international law are customs, conventions, general principles and to a lesser extent the judicial decisions and teachings of qualified experts.[61] The PSI reflects a convention more than any other source. Yet the manner of its creation might preclude it being identified as such because it is not made between states. Does this mean that it is not an example of international law? The PSI was intended to act as a set of principles that did not automatically require states to undertake specific obligations, which is nothing new in the international setting and multilateral agreements also do not intend to bind third parties.[62] Instead states were asked if they wished to endorse the interdiction principles that were specifically directed towards the practical task of preventing proliferation.[63] If a state chooses to engage with the PSI it is expected to carry out, facilitate or allow certain actions. This latter point means the functionality of the PSI is almost identical to that of a convention. Thus the only real obstacle to thinking the PSI sits inside the meaning of international law comes from its creation.

---

55 As the Paris Agreement exemplified in section two, even on catastrophic issues the international community struggles to overcome this problem.

56 C Joyner, 'Rethinking International Environmental Regimes: What Role for Partnership Coalitions?' (2004) 1 (1-2) Journal of International Law and International Relations 89.

57 J Joseph, 'The Proliferation Security Initiative: Can Interdiction Stop Proliferation?' (2004) 34 Social Science 6.

58 Ibid.

59 A Etzioni, 'Tomorrow's Institution Today: The Promise of the Proliferation Security Initiative' (2009) 88 Foreign Affairs 7.

60 J Yoo, 'The Proliferation Security Initiative: A Model for International Cooperation' (2006) 35 Hofstra Law Review 405.

61 United Nations, Statute of the International Court of Justice, (24th October 1945 entered into force 18th April 1946) 33 UNTS 993, Article 38 (1).

62 R Joseph, The Proliferation Security Initiative: A Model for Future International Collaboration (National Institute Press, 2009).

63 E Rosand, 'Combating WMD Terrorism: The Short-Sighted US-led Multilateral Response' (2009) 44 The International Spectator 81.

However, this can be overcome with reference to another contemporary source of international law that also sits outside of Article 38. The UNSC has in the last two decades assumed a role as global legislature.[64] The advent of international terrorism saw the introduction of Resolution 1373, which was intended to create long-term thematic obligations that all UN members were obliged to implement.[65] The role of the UNSC appears not in fact to be legislative in nature, nowhere in the Charter is there mention of a power to introduce international law. The practical effect of the Charter however presents a scenario almost identical to that of a legislator.[66] Article 24 casts the UNSC as having responsibility to maintain international peace and security. In achieving this, complete discretion is granted to the UNSC in the determination of threats and appropriate responses under Article 39. In combination with Articles 25 and 48 (1), that bind UN members to carry out the decisions of the UNSC, the scenario manifests that it is the master of its own remit and its decisions are to be followed by the remaining UN members.[67] It is therefore difficult to differentiate between the role of the UNSC and that of a legislative institution at the international legal level.[68]

This means the sources of international law can now step outside of Article 38, and as such the PSI although unique in terms of creation stage can be considered a form of international law because of the manner in which it creates obligations and responsibilities for those states that choose to endorse it. As the UNSC example shows, the manner in which contemporary international obligations come into existence does not preclude normative character. International law does not appear to have to follow a set process of creation. As such, the PSI can be considered a manifestation of international law that is useful in the contemporary setting. The question now centres on whether or not it functions proficiently according to the problem-solving standard.

The USA acts as the principle member of the PSI but it has no formal leadership role, and instead all states act autonomously, intent on pursuing PSI objectives through cooperation.[69] Any states coming to the PSI do so with the attitude of cooperation and intent to engage of their own volition. The lack of bureaucracy and formal structure of the PSI was deliberately intended to create a dynamic organisation that was able to respond with speed to potential proliferation activities.[70] The USA acts as a 'rudimentary police force' because of its global navy and all other states support its actions directly or through information sharing and allowing access to ports and resources.[71] The cooperation of states around the globe means the geographic reach of the PSI is vast, creating a net to prevent proliferation.[72]

---

64 S Talmon, 'The Security Council as World Legislature' (2005) 99 The American Journal of International Law 175.

65 UNSC Res 1373 (28th September 2001) UN Doc/S/Res/1373.

66 P Szasz, 'The Security Council Starts Legislating' (2002) 96 (4) The American Journal of International Law 901.

67 United Nations, *Charter of the United Nations*, 24th October 1945, 1 UNTS XVI, Articles 25 and 48 (1).

68 The only substantive restriction on this power to introduce binding decisions is that they must concern the purposes of the UN in the maintenance of international peace and security. A procedural restriction could be considered the need for agreement among the permanent members.

69 M Bunn, et. al., 'Steps to Prevent Nuclear Terrorism' (2013) Belfer Centre for Science and International Affairs, <http://nrs.harvard.edu/urn-3:HUL.InstRepos:29914156> accessed 7th September 2019.

70 A Etzioni, 'Tomorrow's Institution Today: The Promise of the Proliferation Security Initiative' (2009) 88 Foreign Affairs 7.

71 Ibid, 8.

72 M Valencia, 'The Proliferation Security Initiative: A Glass Half Full' (2007) 37 Social Science 17.

Principle 1 of the PSI specifies that all states concerned should take on efforts either individually or in concert with other states to interdict the transfer of WMDs and related material.[73] Who should be subject to interdiction remains ambiguous, but the onus appears to be on those states involved to administer their collective territories and designate targets. The main thrust of this provision is essentially to create a net of willing participants to catch out those actors who are thought to be engaging in proliferation activities contrary to international law.

Principle 2 of the PSI expects members to develop 'streamlined procedures for rapid exchange of relevant information'.[74] While Principle 3 demands national legislation to give effect to the two prior principles, which effectively means states have to work to ensure they do not simply join the PSI and fail to carry out its obligations. Though there is a discrepancy as to exactly what behaviours members of the PSI have carried out, the intention is to prevent free riding and this is useful given its ubiquity in certain areas of international law.[75] Moreover Principle 4 expects states to take 'specific actions in support of interdiction efforts'.[76] Again this is useful because within Principle 4 there are a number of specific actions that members are expected to carry out, which enhances cooperative efforts. These actions are not overtly complicated nor do they allow a great deal of interpretation. This meant their implementation was somewhat straightforward, which was useful in the context of solving the proliferation problem.

This novel approach to addressing proliferation was met with the initial endorsement of eleven states. The membership now stands at 105 states. This might only represent approximately half of the international community and so appear to invite immediate criticism on the basis that it is not universal. However, these 105 states can cooperate across the globe to help maintain a substantial network of anti-proliferation, meaning although the PSI is not universal it is significant and able to provide the type of international coverage required. It is also evident that some of the PSI members are able to take on a greater role than others and operate a wide spanning anti-proliferation net.

The biggest challenge is to determine what results flow from the PSI, is it actually a useful mechanism? The USA has indicated its belief that the PSI has had a direct impact upon the objective of preventing proliferation, pointing towards a number of interdictions to exemplify this point.[77] Yet these claims come up against the very real difficulty of knowing whether these interdictions would have occurred prior to the PSI or are a direct result of it.[78] Counterfactual research could be a useful means in which to sidestep this problem and determine if the PSI has been of specific benefit to the anti-proliferation agenda, but unfortunately such studies are not possible because of the secrecy that most PSI members operate under.[79] In light of this secrecy the PSI's success is dependent on the claims from the USA, which again are shrouded in mystery because of the

73 Proliferation Security Initiative: Statement of Interdiction Principles (2003) Principle 1.

74 Ibid, Principle 2.

75 International climate law suffers free riders. For instance under the Kyoto Protocol both Russia and Australia offered very little effort, effectively allowing them to free ride at the expense of those states taking action.

76 Proliferation Security Initiative: Statement of Interdiction Principles (2003) Principle 4.

77 J Yoo, 'The Proliferation Security Initiative: A Model for International Cooperation' (2006) 35 Hofstra Law Review 405.

78 M Valencia, 'The Proliferation Security Initiative: A Glass Half-Full' (2007) 37 Social Science 17.

79 J Joseph, 'The Proliferation Security Initiative: Can Interdiction Stop Proliferation?' (2004) 34 Social Science 6.

lack of provable evidence made available to the public.[80] However, in 2002 the So San incident represented a problem that international law was unable to address. The introduction of the PSI means there is now a mechanism to solve this problem, as the below example exhibits.[81]

In October 2003, the ship BBC China was intercepted on course for Libya, with WMD development related materials on board, specifically a uranium enrichment gas centrifuge.[82] Following this discovery and the change of position on the development of its nuclear programme, the Libyan Government brought to light the startling extent to which a proliferation network was in operation under the leadership of A.Q. Khan, a Pakistani national.[83] Khan's network was responsible for the provision of WMD related materials over a two-decade period to Iran, Libya, the DPRK, and potentially more unknown states.[84] Therefore, although it is very difficult to quantify the impact of the PSI in terms of how much proliferation has not taken place, it is likely that it has helped to discourage and disrupt offenders such as Libya and Khan. As such there is room to argue the existence of the PSI is positive.[85]

To recap, the PSI was introduced as a means in which to create international cooperation on a problem of significant magnitude. Its structure is reflective of an international convention, and although it was created outside the usual rules of international law this does not preclude it being considered international law. The manner in which states choose to come to the PSI, absent negotiation and lengthy conferences, offers significant benefits. The PSI was introduced quickly; it is not subject to the lowest common denominator; and it has been able to accrue a membership that is able to address the problem positively. The following section will consider taking these advantages forward in the climate change context.

IV. A Climate Security Initiative

There are significant parallels between the circumstances that led to the PSI and those that now surround international climate law. The stimulus for the PSI was the discovery that the NPT machinery was being subverted and proliferation was taking place. Breaking this down, on the one hand the threat came to the forefront and there could be no denying its existence. On the other hand there was a gap in the international legal structures that was being exploited. Applying these two elements to climate change, it is startling to see how closely reflected they appear to be.

First, the Mauna Loa Observatory's finding that there is now consistently 400PPM of carbon dioxide in the atmosphere is a stark realisation that the threat is exacerbating.[86] As extreme weather events take place it should also be clear that climatic impact poses a real and dangerous threat

80 M Valencia, 'The Proliferation Security Initiative: A Glass Half-Full' (2007) 37 Social Science 17.

81 A Winner, 'The proliferation security initiative: The new face of interdiction' (2005) 28 Washington Quarterly 129.

82 D Albright, C Hinderstein, 'Unravelling the A.Q. Khan and future proliferation networks' (2005) 28 Washington Quarterly 109.

83 Ibid.

84 M Heupel, 'Surmounting the Obstacles to Implementing UN Security Council Resolution 1540' (2008) 15 Non-Proliferation Review 95.

85 A Winner, 'The proliferation security initiative: The new face of interdiction' (2005) 28 Washington Quarterly 129.

86 Mauna Loa Observatory, 'Daily CO2' (Mauna Loa Observatory Hawaii, 15th May 2019) <https://www.co2.earth/daily-co2> accessed 14th October 2019.

to the international community.[87] The developed states should not consider themselves exempt from these impacts, and as Hurricane Dorian recently exhibited even the USA is subject to severe climatic harm.[88] The indirect impacts of climate change will also have a massive economic impact and hit hard the developed and developing alike, which will have ramifications for development and societal progression.[89] Like the So San ship incident, these impacts should be characterised as the danger the world now faces from climatic harm.

Second, the reason for the exacerbation of climate change is because global emissions continue to increase. Through its over commitment to discretion the Paris Agreement has created a legal gap in the international climate response. This gap means states are masters of their own obligations and as such many choose not to adopt significant climate response action. Even states with the economic capacity to respond to climate change have been utilising the discretion of Paris to avoid real commitments to reduce emissions. There is no recourse to this because most if not all states are fulfilling their legal obligations under Paris through the submission of Intended Nationally Determined Contribution documents. Consequently, there is a serious gap within the international climate response.

Just like in the PSI instance there is no time in which to craft a response to this problem through the traditional channels of international law. The IPCC has made it clear that if we do not grasp the problem of rising emissions by 2030 then we will lose the ability to respond effectively in the very near future.[90] A convention that takes years to agree and is subject to the lowest common denominator problem cannot offer the speed and robustness of response that is required. An immediate international response to the problem is required and in this context the PSI offers a useful model to consider. A Climate Security Initiative (CSI) could be introduced in a matter of months, and could contain the provisions necessary to make a serious impact in terms of emission reductions. The lack of negotiation that was characteristic of the PSI would be of great use here and prevent the inevitable race to the bottom that the Paris Agreement has facilitated.[91]

Accepting these parallels is only the first step, and crucially a leader is required to take forward a CSI. In the context of the PSI the USA was central, taking on a leadership role in crafting and implementation. Unfortunately the USA has not put itself forward as a leader on climate change. The opposite is in fact more accurate and as we saw above it was a big instigator in the eventual failure of the Kyoto Protocol.[92] Moreover, the actions of the current U.S. Government are equally harmful to the international climate effort and its apparent withdrawal from the Paris Agreement means one of the world's biggest emitters and most powerful states will not be adopting positive internal provisions or taking a leading role.[93]

87 UNEP, 'GEO 6: Healthy Planet Health people' (UN Environment, 2019).

88 S Gibbens, 'How warm oceans supercharge deadly hurricanes' (National Geographic, 4th September 2019) <https://www.nationalgeographic.com/environment/2019/09/how-warm-water-fuels-a-hurricane/> accessed 16th September 2019.

89 K Ricke, L Drouet, K Caldeira, M Tavoni, 'Country-level social cost of carbon' (2018) 8 Nature Climate Change 895.

90 IPCC Report, 'Global Warming of 1.5 °C: Summary for Policy Makers' (8th October 2018).

91 J Dehm, 'Carbon Colonialism or Climate Justice? Interrogating the International Climate Regime from a TWAIL Perspective' (2016) 33 Windsor Yearbook of Access to Justice 129.

92 G Bush, White House Archives (White House Archives 16th April 2008) <https://georgewbush-whitehouse.archives.gov/news/releases/2008/04/20080416-6.html> last accessed 10th October 2018.

93 BBC, 'Paris Agreement: Trump confirms US will leave climate accord' (BBC, 24th October 2019) <https://www.bbc.co.uk/news/world-us-canada-50165596> accessed 29th October 2019.

The creation of a CSI will have to come from somewhere else. However there is scope to argue that it should still come from at least one of the permanent members to the UNSC because of the leadership role they adopt in the security apparatus and the influence they continue to have around the world.[94] There is zero chance that Russia will adopt such a role. Its position on climate change is detrimental to global efforts and it has stressed on more than one occasion that climate change is not a security issue but a development one.[95] China has become less resistant to the security apparatus adopting a role in climate change, though it centralises climatic impact and so would likely want to pursue adaptive policies and avoid mitigation efforts, such as a CSI.[96]

By process of elimination that leaves France and the UK, both of which have a much better record on climate change than the other permanent members. It was the UK that first brought climate change before the UNSC in 2007,[97] and has continually supported a greater role for the world's executive right up to the most recent discussion in January 2019.[98] France also advocated for a more involved role of the UNSC in the most recent debate on climate change.[99] Combined with the recently stated aspiration of France and the UK to become carbon neutral by 2050, these two states offer leadership potential on the climate threat.[100] They both have an economic capacity that will allow them to take on the administrative tasks of creating a CSI and they could easily extend this to the implementation of its provisions. Their position on the UNSC could also act as a way not only to help lead the international community forward, but as a foil to expose the restrictive stances of the other permanent members, inadvertently putting pressure on them to respond more urgently.[101]

In addition, all those states that wish to pursue carbon neutrality and have publically expressed this would be encouraged to participate. New Zealand offers one such example and has expressed significant carbon reduction plans.[102] New Zealand also comes with the added benefit of being identified as a relatively neutral state that does not seek to push colonial agendas or hegemonic relationships. This would create a strong foundation in which to project an element of legitimacy into a CSI. Similarly those Scandinavian states that are seeking to take a more robust role on

94 S Scott, R Andrade, 'The Global Response to Climate Change: Can the Security Council Assume a Lead Role?' (2012) 18 (2) Brown Journal of World Affairs 215.

95 UNSC Verbatim Record (17th April 2007) UN Doc/S/PV/5663; UNSC Verbatim Record (20th July 2011) UN Doc/S/PV/6587.

96 UNSC Verbatim Record (25th January 2019) UN Doc/S/PV/8451.

97 F Sindico, 'Climate Change: A Security (Council) Issue?' (2007) 1 (1) The Carbon and Climate Law Review 29.

98 UNSC Verbatim Record (25th January 2019) UN Doc/S/PV/8451.

99 Ibid.

100 B Felix, 'France sets 2050 carbon-neutral target with new law' (Reuters 27th June 2019) <https://www.reuters.com/article/us-france-energy/france-sets-2050-carbon-neutral-target-with-new-law-idUSKCN1TS30B> accessed 30th October 2019; Gov UK, 'UK becomes first major economy to pass net zero emissions law' (Department for Business, Energy and Industrial Strategy, 27th June 2019) <https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law> accessed 29 October 2019.

101 This is based on a similar logic applied to the veto use, which suggests permanent members are encouraged by one another, E Luck, *UN Security Council Practise and Promise* (1st edition, Routledge, 2006).

102 Anon, 'About New Zealand's emissions reduction targets' (Ministry for the Environment, 2019) <https://www.mfe.govt.nz/climate-change/climate-change-and-government/emissions-reduction-targets/about-our-emissions> accessed 28th October 2019.

climate change should be encouraged to participate at the creation stage for the same reason.[103] This would again help to create a leadership team that spans the world and is seen as detached from the mainstay of hegemonic relations.[104] Moreover, any and all states that are inclined to join should be encouraged to do so, yet the extent to which a CSI will attract states will very much depend on its content.

The content of a CSI should reflect a limited number of principles that the members intend to achieve. Following the example of the PSI these do not need to be subject to lengthy negotiations. Instead these principles should be established according to the problem solving standard and reflect the will of those drafting states. Since France, the UK, New Zealand and Scandinavian states have all expressed an intention to become carbon neutral and this should be the predominant aspiration of the CSI.[105] In addition, the CSI should seek to plug the holes in the Paris Agreement by situating all members as dedicated to ensuring their emission reduction plans reflect a commitment that will see the 1.5°C objective of Paris achieved. Beyond this the CSI could pledge for members to cooperate towards the achievement of widespread carbon neutrality and the steady but tangible reduction of annual carbon emissions. An annual reduction target would be useful to illuminate to the world precisely what action is being taken by these leading states.

These principles could be drafted as follows:

1. Members of the CSI agree to aspire to carbon neutrality before the beginning of 2030
2. Members must undertake efforts to ensure domestic emissions do not exceed a level that would result in more than a 1.5 °C global temperature increase
3. Members will adopt annual measurement practises to document real time emission reductions and publish these widely
4. Members agree to review cooperative mechanisms to help ensure all members are working toward commitments 1 and 2
5. Members agree to promote capacity sharing mechanisms through the Paris Agreement, to support all those states seeking to reduce emissions
6. Members agree to participate in a carbon capacity response fund for developing nations reflective of their economic GDP

If a CSI were to adopt these principles it would offer a means in which to inject some life into the Paris Agreement. The intention of states to reduce emissions to achieve the Paris Agreement's overall objective would be extremely positive and offer an outside example to the rest of the world. The extra commitments within this framework would also provide a more robust approach to emissions that would see a number of powerful states take on a leadership role. This would help to reverse the race to the bottom ideology that engulfs the Paris Agreement. Also, it would

103 Medium, 'Nordic Ministers: Declaration on Nordic Carbon Neutrality' (Medium, 25th January 2019) <https://medium.com/wedonthavetime/decleration-on-nordic-carbon-neutrality-898be0a9722e> accessed 30th October 2019.

104 Although the UK and France are permanent members and possess the same veto power as the USA, China and Russia, they both use it less and are not viewed in the same light. The relative power hierarchy of the permanent members also places the UK and France as distinct from the other three, Scott S, 'The attitude of the P5 towards a climate change role for the Council' in Scott S, Ku C (eds) *Climate Change and the UN Security Council* (1st edition, EE, 2018) 209.

105 New Zealand, 'New Zealand sets target of net zero emissions by 2050' (New Zealand Foreign Affairs and Trade, 14th November 2018) <https://www.mfat.govt.nz/en/countries-and-regions/latin-america/mexico/embajada-de-nueva-zelandia/nueva-zelandia-establece-cero-emisiones-netas-para-2050/> accessed 29th October 2019.

inadvertently highlight the inadequate efforts of all those states that are not taking serious action to confront climate change. Questions may be raised as to why states like Canada and Australia are not part of this movement to address climate change, potentially creating domestic pressure.

This domestic pressure is becoming more important and the wider global public are more aware of the danger posed by climate change than ever before. The Extinction Rebellion movement has shed light on the extent of the problem, and through their protests have brought the issue directly to the public.[106] Greta Thunberg has also made significant inroads in taking climate change to the people of the world and her efforts to galvanise a youth movement have been met with considerable success.[107] These movements have done an immense amount of good in terms of breaking the apathy that many experience towards climate change in their daily lives. There is perhaps now a sense of global urgency that might help to provoke states into more robust action. The creation of a CSI will help to take this momentum forward and the damage done by the legal effectiveness argument attached to the Paris Agreement may be reversed. Consequently there is room to believe that a CSI could have a huge impact on the apathy of the international community by capitalising on this momentum and helping to stimulate a fight back at the time when the world needs it most.

V. Conclusion

There can be very little disagreement that the current mechanisms to address climate change have failed. The UNFCCC was a tentative beginning that was quickly undermined by global disagreement when the Kyoto Protocol was introduced. As a consequence to these disputes the Paris Agreement was premised entirely on state discretion and the intent to bring all state parties into the process. The result of this was a lowest common denominator agreement that through the INDC model has unequivocally failed to stem the problem of global emissions. As such it is reasonable and vital that we look for new ways to introduce international climate law.

This paper has been orientated towards this objective. Taking inspiration from the proliferation field it has been introduced that there is a possibility for the Proliferation Security Initiative to be used as a model for a climate change response. The PSI was able to avoid many of the creation obstacles of international law and as such have an impact on solving the problem. Its introduction was fast and its content uncompromising, meaning it was able to cut to the centre of proliferation.

Yet we are now facing the most pressing climate change circumstances. With every day that passes we push the earth closer to a tipping point that will see drastic and irreparable changes to the global climate. The impacts on humanity will be universally devastating. In such a context there is room to consider a Climate Security Initiative. Such an initiative would require global leadership, and some forward thinking states have the necessary attitude and capacity to take this on. The content of such a framework could be crafted to achieve carbon neutrality among members by 2030 and help to support the Paris Agreement more broadly. If a Climate Security Initiative can be agreed and its members take on this leadership role it will likely have a positive impact

106 R McKie, D Gayle, 'Climate rebels open new fronts across capital as protests escalate' (The Guardian, 12th October 2019) <https://www.theguardian.com/environment/2019/oct/12/extinction-rebellion-activists-open-new-fronts-across-london-as-protests-escalate> accessed 28th October 2019.

107 M Belam, 'Greta Thunberg: teenager on a global mission to make a difference' (The Guardian, 26th September 2019) <https://www.theguardian.com/environment/2019/sep/26/greta-thunberg-teenager-on-a-global-mission-to-make-a-difference> accessed 27th October 2019.

on the global attitude towards climate change. The real benefit it could offer is to help reverse the race to the bottom philosophy that international climate law is currently premised upon. In such challenging times we must find innovative mechanisms to respond. A Climate Security Initiative offers an extra ordinary response, and a means to avoid the climatic cliff edge.