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A climate treaty without the US Congress: Using executive powers to overcome the 'Ratification Straitjacket'

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Climate regime; ratification; US; climate policy; UNFCCC

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A Climate Treaty without the US Congress: Using Executive Powers to Overcome the 'Ratification Straitjacket'

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Abstract

The challenge of achieving US ratification of international environmental treaties is a recurring obstacle for the world, including the climate regime. Despite the perceived importance of the US to the success of any future international climate agreement, there has been little direct coverage in terms of how an effective agreement can address US legal participation. This paper explores potential ways of allowing for US legal participation in an effective climate treaty. Possible routes forward include the use of domestic legislation such as section 115 (S115) of the Clean Air Act (CAA), and the use of sole-executive agreements, instead of Senate ratification. Legal participation from the US through sole-executive agreements –requiring only the consent of the President- is possible if the international architecture is designed to allow for their use. Architectural arrangements such as varying legality and participation across an agreement (variable geometry) could allow for the use of sole-executive agreements. Two broader models for a 2015 agreement with legal participation through sole-executive agreements are constructed based upon these options: a modified pledge and review system and a form of variable geometry composed of number of opt-out, voting based protocols on specific issues accompanied with bilateral agreements on mitigation commitments with other major emitters through the use of S115 and sole-executive agreements under the Montreal Protocol and Chicago Convention (Critical Mass Governance). While there is no single solution, Critical Mass Governance appears to provide a comprehensive and optimum combination of tools to effectively allow for US legal participation whilst ensuring an effective climate treaty.

1. Introduction

A milestone international climate agreement, in which it is expected that countries will commit to climate change related greenhouse gas emissions mitigation targets for a period beyond 2020, will be negotiated during the 21st Conference of the Parties (CoP) to the United Nations Framework Convention on Climate Change (UNFCCC) in Paris, 2015. The success of the agreement is considered by many to depend on the participation of the United States (US), a world superpower and second largest greenhouse gas emitting country. The constraints on US ratification of any international legal instrument, particularly an environmental one, has been a repeated stumbling block for the international climate regime; most notably when the US signed but could not subsequently ratify the 1997 Kyoto Protocol (Depledge 2005). While US leadership is seen as a necessary ingredient for the success of an international climate deal (Terhalle and Depledge 2013; Purvis and Stevenson 2010; Grundig and Ward 2015), the US has been unable to take initial federal legislative steps, participate legally, or take an international leadership role in the climate negotiations. The problem is rooted in the US Constitution and is unlikely to change in the foreseeable future (an issue that will be explored later in Section 2.2). Essentially the US is in a 'ratification straitjacket' making it highly unlikely that it will ratify an environmental treaty through the Senate or Congress.

While the role of the US in the climate regime has been subjected to considerable scrutiny, exploration of architectures that directly address its participation has been limited. Published research covers a number of topics including sub-national action on climate mitigation within the US (Schreurs 2008; Selin and VanDeveer 2011; Lutsey and Sperling 2008) and lack of environmental multilateral engagement at the federal level (Bang et al. 2007; Paterson 2009; Bang et al. 2012; Purvis 2008). There has also been a proliferation of literature examining possible architectures for a future agreement (Aldy et al. 2003; Haites et al. 2013; Bodansky 2009; Bodansky and Diringer 2014; Sugiyama and Sinton 2005; Aldy and Stavins 2007; Victor 2011, 2009). Notably, the intersection between these issues and how to address the question of US ratification in the 2015 climate agreement has received less attention. Two important exceptions to this are the work of Chang (2010b) on US executive agreements that could be conducted in relation to climate and more recently by Bodansky on the legal options for US acceptance of a 2015 climate change agreement. This paper will build upon their work and look beyond domestic options towards political considerations. Importantly it will specifically investigate what architectures are needed for legal engagement to occur without compromising the effectiveness of the agreement. Altering an agreement to allow for US legal participation is worth little if it significantly undermines the overall effectiveness of the treaty. This article will explore

how to create an effective climate agreement with US legal participation by addressing the following two research aims:

1. *To provide an overview of the existing legal and institutional options that would facilitate US legal participation in a future climate agreement.*
2. *Based upon existing options to construct an 'optimal' agreement that would allow for US legal participation whilst providing an effective international architecture.*

The topic of US participation will be discussed by first outlining the particular institutional and political hurdles the US faces in engaging in international climate policy, followed by discussion of the importance of the legality of any future agreement and existing proposals for the 2015 agreement. The likely options for an effective and feasible 2015 climate agreement with US ratification will then be explored. Models built from combining these options and their respective feasibilities will then be analysed, before determining the 'best case' model.

2. Background: Domestic Politics, International Consequences

2.1 The Great Divides: US Climate Politics

The landscape of US climate politics is marked by two great divides which have made progressive climate legislation near impossible. The first divide is the opposition that exists between the Democratic and Republican parties. Climate change is a partisan issue with Democrats regularly expressing belief in climate science and favouring strong mitigation actions, while Republicans are often sceptical of the science and opposed to mitigation measures. Gallup polls and surveys show that these stances have become increasingly polarised over time (Dunlap and McCright 2008; Centre 2013). Even when bipartisan support exists, the US Congress and Senate are prone to gridlock and rarely capable of radical shifts (Tjernshaugen 2005; Bang 2010). Given that the Republican Party currently holds a majority in both the Senate and Congress until at least the next round of elections in 2016, ratification of a strong climate treaty, or federal mitigation legislation are forlorn hopes.

The effect of Republican opposition and polarisation over climate change can be seen in the Senate and its unwillingness to internationally engage with any legal agreement on climate

change. The Senate has already signalled, through the 1997 Byrd-Hagel Resolution[1], an unwillingness to engage in any international climate agreement that does not require greenhouse gas emissions reductions from major developing countries. Recently a bill to simply acknowledge the role of human activity as a driver of climate change was defeated in the Senate (Goldberg 2015). The US has consistently been sceptical of UN–based multilateralism (Patrick 2002), particularly environmental multilateralism (Brunnee 2008), and along with the power of lobbying groups and increasing partisanship on climate issues there appears to be little to no appetite for international climate cooperation in the Senate or Congress (Bang et al. 2012; Depledge 2005; Purvis and Stevenson 2010; Purvis 2004).

Despite the deadlock in the Senate and Congress, both the Obama administration and many US states appear to be politically willing and capable of carrying out significant, however still restricted, domestic mitigation and international engagement. The Obama administration has proven willing to pursue an active climate agenda and test the frontiers of executive powers with a multitude of climate related initiatives which include a pledge of $3 billion US to the Green Climate Fund, a bi-lateral deal on climate, as well as a related pact on reducing HFCs, with China, and the Environmental Protection Agency (EPA) implemented Clean Power Plan for regulating energy sector emissions. Sub-nationally a number of states, such as California, have implemented a range of broad climate mitigation measures and policies in lieu of federal level policy (Schreurs 2008; Lutsey and Sperling 2008; Lachapelle and Paterson 2013; Rabe 2008; Rabe et al. 2005). Rabe (2011) has described the current situation as ‘contested federalism’ with both leading states and the executive simultaneously moulding climate policy across the country. Overall, current US climate politics is a balance between a proactive executive and a number of progressive states against a recalcitrant Congress and Senate.

This current landscape of US climate politics holds a number of key lessons for the establishment of any future treaty. First, any future agreement should seek to engage the US, at least in the short term, solely through the Executive rather than the Senate or Congress. Second, that implementation domestically will need to rely upon existing legislation or the action of US states as new legislation from Congress on emissions mitigation is unlikely to be forthcoming.

2.2 The US ‘Ratification Straitjacket’ and Options for Legal Engagement

The US possesses a number of unique institutional arrangements which, when combined with the political deadlock outlined previously in section 2.1, make the ratification of international

[1] S.RES.98, 105th Congress, 1st session (1997).

agreements, particularly environmental ones, extremely difficult. These issues have been clearly identified and have resulted in a number of environmental agreements being signed but not ratified by the US, such as the Kyoto Protocol (Depledge 2005), or neither signed nor ratified, such as the Aarhus Treaty (Schreurs et al. 2009). Generally most perceive US ratification as a matter requiring a supermajority vote in the Senate. Article II of the US constitution states that the President "shall have power, by and with the advice and consent of the Senate, to make treaties, provided two thirds of the Senators present concur". Accordingly, the enactment of an Article II treaty on a future climate agreement requires a two-thirds supermajority affirmative vote and 60 votes overall to avoid an opposition filibuster (Chang 2010b: 339), conditions that are highly unlikely to be met in the near future. The US is thus stuck in a 'ratification straitjacket', with its ability to engage multilaterally on climate change via the Senate or Congress constrained by political dynamics that are likely to change only once political consensus and domestic legislation are in place.

However the US is capable of legally engaging with international agreements through a number of other methods which go beyond Article II treaty ratification. All of these require the consent of the President as they are the 'sole organ' through which the US engages with international law:

1. Article II treaty ratification: requires the consent of the executive and a two-thirds majority vote in the Senate.
2. Congressional-executive agreements: requires the consent of the Executive and ex-post or ex-ante legislation to be passed by the Congress.
3. Sole-executive agreements (also known as presidential-executive agreements): requires only the consent of the President so long as the agreement lies within the independent constitutional powers of the executive and can be implemented under existing domestic law. A form of these is the acceptance of an international agreement by the executive that is pursuant to a previously ratified treaty (a treaty-executive agreement).

There is general consensus that executive agreements, both congressional and presidential, have the same legal status as Senate ratification once enacted (Krutz and Peake 2009; Purvis 2008). Importantly, executive agreements are not a rarity. Over the past sixty years over 94% of international agreements have been treated as executive agreements rather than Article II treaties (Peake et al. 2012). This trend has continued under President Obama with 407 executive

agreements completed at the 111th Congress alone (Peake et al. 2012: 1298). No congressional-executive or sole-executive agreements have been repealed through judicial challenge in the past (Chang 2010b; Bodansky 2015). Congressional-executive agreements are interchangeable with Article II treaties and have a wide scope of issues that can be covered. However, as noted previously the Congress is also politically divided and part of the ratification straightjacket which has held the US in place. On this basis congressional-executive agreements cannot be considered as politically feasible.

Sole-executive agreements appear to be the only politically feasible way forward beyond the ratification straightjacket. Indeed, Peak et al (2012) have shown through a quantitative regression analysis that executive agreements are more widely used in times of high partisanship in the Senate. When one or both houses are blocked, the option of executive agreements has become a logical choice for President's to carry out their foreign policy objectives. While sole-executive agreements are not as common as Congressional-executive agreements they nonetheless have been repeatedly used in relation to environmental agreements. The 1991 Air Quality Act with Canada, 1979 Long Range Transboundary Air Pollution Convention (LRTAP) and the recent 2013 Minimata Convention on Mercury have all been completed via presidential-executive agreements (Bodansky 2015: 14). However, the uses of sole-executive agreements are not interchangeable with Senate ratification and have a number of limitations.

The ability of the President to enter into a sole-executive agreement is dependent upon a number of factors which restrict its uses. Legal scholars are in general agreement that the authority of the President to enact sole-executive agreements is reliant on:

- The independent powers of the executive, particularly in relation to the foreign affairs mandate under the constitution. The extent of these powers is extremely unclear and therefore open to, potentially broad, interpretation (Chang 2010b: 353);
- Authority devolved from existing Article II treaties. In effect the President is empowered to maintain and take care of existing international commitments and obligations (e.g. such as those under the already ratified UNFCCC);
- That the agreement is not inconsistent with existing domestic law and there is preferably the presence of relevant enabling domestic legislation.

Given these requirements, the applicability of sole-executive agreements is contingent upon the content of an international agreement. Execution of sole-executive agreements on new

financial commitments or binding emissions targets are unlikely to be possible given that these are not covered by an existing ratified treaty (e.g. the 1992 UNFCCC), the foreign affairs mandate, or any existing domestic legislation or statutory language (Bodansky 2015). However, there does seem to be general agreement amongst scholars (Chang 2010b; Purvis 2008; Bodansky 2015) that sole-executive agreements can be enacted upon the following climate related issues:

- Monitoring, reporting and verification (MRV) and information sharing;
- Procedural requirements such as provisions to submit, maintain and review an nationally determined contribution (NDC);
- Capacity building;
- The creation of an international compliance mechanism (assuming it is not in breach of pre-existing WTO law);
- Scientific and technological cooperation;
- A sole-executive agreement could be entered on aviation emissions through the Chicago Convention on International Civil Aviation (hereafter the "Chicago Convention") and implemented through existing legislation (Chang 2010b);
- An agreement on HFCs could be conducted as an amendment to the Montreal Protocol and enacted through a sole-executive agreement.

While a sole-executive agreement is unlikely to be possible for a full binding treaty with emissions reductions and financial targets, it is possible for a number of significant issues. However, the permanence and stability of sole-executive agreements are questionable as they can be abolished by the Congress through the implementation of a later-in-time statute that is inconsistent with the executive agreement (Purvis 2008; Bodansky 2015) or through an executive action by a future Executive (Chang 2010b). There are other avenues for political retaliations. These could include restricting the funding of implementing bodies such as the EPA as Congress must approve the budget and any appropriation of funds. The use of sole executive agreements on climate change while possessing legal potential is a politically risky move. But before attempting to work around the ratification straightjacket it must be asked whether a legally-binding agreement that requires legal participation is necessary?

2.3 To Bind or Not to Bind? The Importance of Legality

The conventional wisdom is that legally binding policy instruments are most effective in international diplomacy. However, it has been suggested that non-binding agreements can be more effective (Victor 2006), particularly due to the increased flexibility and speed in implementation without requiring domestic legislation (Brummer 2014). Voluntary international commitments on tuberculosis are one example of the successful application of such an approach (Heywood 2013). Criticism of the popular preference for legally binding instruments suggests that it can lead to weakened structure and substance (Raustiala 2005). When states know that they will be bound under international law they are likely to be cautious about making ambitious commitments or creating strong enforcement structures in order to avoid a loss of reputation and/or punitive measures.

There are also many reasons for opting for a legally binding approach, particularly in relation to climate change. Hare et al (Hare et al. 2010) highlight that with respect to the 2015 agreement, legal commitments promote confidence in target delivery, facilitate the implementation of domestic legislation, and have become a preferred choice as more stringent targets are required to stabilise global warming within 2°C above pre-industrial levels by 2100. Legal contracts offer greater credibility and stability than non-binding pledges (Raustiala 2005) and provide a long-term, reliable framework for private and public action and investment.[2] This is a particularly important issue give the threat of infrastructure lock-in and likely requirement to peak emissions before 2015 or 2020 in order to limit warming to the 2°C target (Rogelj et al. 2011; IEA 2011). Investment and finance flows needed to reach the long term temperature goal require the credibility and stability that only legal commitments can provide.

Legality is also important as a provider of legitimacy. Importantly, a non-legally binding agreement is unlikely to garner the legitimacy and support of civil society, the public, or many states. Indeed many parties have already based their continued presence in Ad-Hoc Working Group on the Durban Platform (ADP) negotiations on the assumption of creating a legally binding agreement (Voigt 2012). Legitimacy, credibility, and stability all mean that for an agreement that reaches the existing 2°C goal a legally binding nature is likely to be a necessity.

[2] It should be noted that legality does not address the issue of enforcement or compliance. A country that is legally bound to certain targets could nonetheless break its commitments and withdraw unilaterally without any real penalty, if a credible enforcement structure does not exist e.g. Canada withdrawing from the second commitment period of the Kyoto Protocol.

3. Literature Review: Wider Lessons for Addressing US Participation

The agreement in Durban in 2011 to create a successor to the Kyoto Protocol has led to a number of different proposals (Haites et al. 2013; Falkner et al. 2010; Urpelainen 2013; Barrett and Toman 2010). Agreement elements have been analysed (Briner and Prag 2013; Bodansky 2009) and existing policy options have been reviewed (Aldy et al. 2003; Bodansky et al. 2004; Briner and Prag 2013; Morgan et al. 2013). Some of these proposals provide relevant insights.

Proposals from Sugiyama and Sinton (2005), Urpelainen (2013) and Falkner (2010) all advocate an incremental approach in which negotiations progress via a number of agreements on smaller individual issues, creating momentum for an eventual global treaty. The rationale for these is quite simple: while it may be impossible to craft an effective deal for all parties across all issues, enough political will and momentum exists on certain issues to move them forward. In essence, acquiring 'low-hanging fruit' may create feedbacks and longer-term benefits.

Bodansky (2009) sets out a number of different models for the next agreement, including an expanded top-down Kyoto style agreement; a bottom-up agreement that would be the simple formalisation of pledges made in Copenhagen (2009) and Cancun (2010); or a 'multi-track' approach in which an agreement could include both universal elements and optional aspects. Similarly, the official Australian (2013) and New Zealand (2014) submissions to the ADP (workstream I) have advocated for varied participation (variable geometry) and, to an extent, legality across the agreement. Both Australia and New Zealand have proposed that an agreement could have a legally binding deal on a minimal number of core commitments along with binding or non-binding optional provisions[3] and attached national schedules that include nationally determined commitments (NDCs). These suggestions rely upon the logic that a feasible agreement will likely need to provide countries with the ability to opt out or not be bound on certain issues. Variable geometry, varied legality and incremental approaches are all relevant ideas for the effectiveness and feasibility of a 2015 treaty, especially in relation to the US.

[3] The New Zealand proposal has since been endorsed by the US climate envoy Todd Stern.

4. Options for US Ratification and Partial Ratification

4.1 International Architecture

4.1.1 Pledge and Review

The pledge and review model involves countries putting forward their own nationally determined and non-legally binding pledges which are then periodically reviewed (Heywood 2013; Bodansky et al. 2004). It is a politically feasible approach that allows for maximum participation to the detriment of ambition. However, as noted previously, the absence of legally-binding targets or financial commitments and a focus on the provision and maintenance of an NDC and supporting MRV would make a pledge and review style agreement capable of having US legal participation via a sole-executive agreement. This is the likely reason that it is supported by the Obama administration, who has championed this model since mid-2009, including in their most recent UNFCCC submission (U.S. 2014), leading some scholars to label this bottom-up, pledge and review model as the 'American Approach' (Hare et al. 2010: 601).

Yet even with US legal participation via the use of a sole executive agreement, an agreement based on the pledge and review model would have weaknesses making it unlikely to be effective. The effectiveness of pledges substantially depends on strong, systematic and regular reviews and assessments of targets coupled with stringent MRV (Victor and Salt 1995). Yet as Hare et al observe, 'verification can only go so far' (2010: 608). Experience with the Kyoto Protocol indicates that even comprehensive, common accounting rules can be manipulated (Hare et al. 2010) and it is very risky to assume that countries will significantly increase their targets on the basis of review and international pressure. Moreover, strong review structures tend to lead to weaker pledges as states attempt to ensure their capacity to comply with self-imposed targets (Raustiala and Slaughter 2002). At worst, pledge and review could lock in lowest common denominator behaviours. Existing national emission reduction pledges amount to reductions consistent with a 4°C (Fekete et al. 2013) or even 6°C (PwC 2013) degree rise in global temperatures. Modelling by Riahi et al (2013) suggests that following existing pledges could restrict policy and technology options, increase overall mitigation costs and make existing long term stabilisation targets unattainable. The price of a pledge and review agreement structured to allow for US legal participation is likely to be the inadequacy of that agreement to meet the UNFCCC objective of avoiding dangerous anthropogenic warming. When a pledge and review model consists of non-binding pledges coupled with legally binding rules, it can be considered an agreement with varied legality.

4.1.2 Varied Legality

If the legality of a treaty is the clear hurdle to US participation then altering the legal nature of the agreement is a logical solution. There are primarily three legal options which the 2015 agreement can be made through: a) a legal protocol; b) amendments to the existing 1992 UNFCCC treaty; or c) COP decisions. These legal options can be paired with non-binding schedules, annexes and targets. The likely outcome of negotiations would appear to be a mixture of these different elements (Voigt 2012). Indeed, the current US strategy appears to be to construct an agreement which is only legally-binding on issues which can be accepted through sole-executive agreements. The 2014 US submission to the ADP states that it expects that "certain elements set forth above will be internationally legally binding" including the need for countries to submit a pledge as well as MRV provisions (2014: 7). Both of these elements are capable of being accepted via sole-executive agreements. Similarly a recent New York Times investigation outlined how the Obama administration is planning on creating a hybrid agreement which uses 'politically binding' elements (presumably COP decisions) alongside amendments to the UNFCCC in order to bypass the need for Senate ratification (Davenport 2014). Amendments to the annexes of the Convention, whilst requiring a three-quarters majority vote of the COP, would likely only require an instrument of acceptance from the Executive, and not Senate ratification. Amendments to the provisions of the Convention could very well require a new ratification process (Bodansky 2015: 27). Moreover this is politically unfeasible given that a number of developing countries have been adamant that the principles and provisions of the Convention must remain untouched. Accordingly a 2015 agreement could be designed so that the only legally-binding elements are compatible with acceptance through sole-executive agreements and the rest is carried out through politically binding COP decisions.

4.1.3 Variable Geometry

Variable geometry models for a 2015 climate agreement could facilitate US legal participation by allowing for parts of the agreement to be optional, or splitting the agreement up. Currently UNFCCC negotiations operate under an interlinked decision making process whereby 'nothing is agreed to until everything is agreed': the negotiations strive for a comprehensive and complete global package. To date this approach has not succeeded in achieving US legal participation. In one proposal for a variable geometry model Bodansky (2012) suggests an alternative approach with some mandatory and legally binding core aspects while also allowing variation in the nature of the commitments made by individual states (e.g. economy wide reductions or reductions in emissions intensity). However, it may be more effective to allow for variation in the inclusion of issues (issues as discussed within the negotiations e.g. MRV, capacity building etc.) rather than in the nature of commitments. This would be somewhat similar to the

aforementioned Australian and New Zealand proposals for having optional provisions (which could be either legally binding or non-legally binding) linked by a single central treaty covering a set of agreed core legal elements. This approach could be expanded on by creating a collection of opt-out optional protocols, instead of provisions, on specific issues. This resonates with what Bodansky (2004) highlights as the portfolio approach where numerous actions are undertaken by different collections of like-minded actors, although this approach focuses primarily on technology and 'minilateralism'. Giving parties the ability to choose which negotiating areas they are bound by could allow the US to legally participate in individual protocols on issues that can be accepted through sole-executive agreements. As outlined previously in section 2.2, sole-executive agreements are feasible in a range of areas.

4.2 Domestic Options

4.2.1 Sole-Executive Agreements

The most obvious and important domestic measure is the use of sole-executive agreements. These are an important and feasible, option which fits existing political circumstances. This approach has been explored previously in Section 2.2.

4.2.2 Section 115 of the Clean Air Act

The use of the little known clause within the Clean Air Act (CAA) of the US EPA is one way forward for both US domestic action and international cooperation. Section 115 (S115) of the CAA covers international air pollution and stipulates that if there is sufficient evidence to suggest that *'pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country'* then the EPA can require US states to regulate the offending pollutants. The process can be initiated by the Secretary of State, without the consent of Congress or the Senate, but can only be applied in conditions of 'reciprocity', that is when the foreign countries in question have *'given the United States essentially the same rights with respect to the prevention or control of air pollution'*. Chang (2010a) contends that this clause provides a clear and feasible legal path to quickly and directly introduce a carbon mitigation cap and trade system to be implemented by US states. S115 has recently received further attention, with a number of academics suggesting that it provides the legal basis for the US to enter into an international, legally binding agreement on mitigation (Schlanger 2014).

However, there are a number of limitations to utilising S115. First, it would only apply to emissions mitigation, and thus could not be used as the basis for US engagement with a broader

multilateral deal. Second, the condition of reciprocity would be tedious and impossible to prove for all UNFCCC member states. Previously both the endangerment and reciprocity findings have been proven for Canada in relation to acid rain, but this required amendments to the Canadian Clean Air Act in 1980 in order to more closely mimic the statutory language of the US CAA and prove reciprocity (Chang 2010a). While this means it is not appropriate for a 'global package' climate agreement, S115 could be used to allow the US to participate in a bilateral deal on mitigation with other major emitters who have taken (or are willing to take) equivalent domestic action and possess similar statutory language or are willing to adopt such language. As Purvis (2008: 33) observes, the CAA could provide the legal basis for both domestic emissions regulation and the linking of US carbon markets with others internationally. S115 of the CAA, like the other tools and approaches discussed here, relies upon the political willingness of the incumbent US administration to use it and risk domestic political backlash. Yet given the need to appeal to the Executive and US states, S115 holds considerable promise as a way to facilitate both strong domestic action and legally binding international commitments without Senate or Congressional approval.

5. Models for US Ratification

Based on the different potential provisions for managing US legal participation, shown in Table 1, two models of effective climate agreements with US legal engagement have been constructed. Table 2 presents the two models of: a) a pledge and review system with varied legal elements and participation, and; b) a variable geometry based package termed '*Critical Mass Governance*' (CMG). These scenarios can be seen to correspond to Bodansky's (2012) typology with the first scenario acting as an altered pledge and review system and the second as an example of a multi-track agreement. There are two key distinctions between the different models. First, the modified Pledge and Review model relies upon the use of non-binding pledges and commitments in order to allow for the use of sole-executive agreements. In contrast, CMG uses S115 for legal engagement on targets and breaks the agreement down into numerous legal protocols, most of which could be accepted through sole-executive agreements, in order to maximise the number of issues which are covered in a legally binding manner. Second, CMG is a more holistic package approach which makes use of bilateral measures and agreements under other conventions (the Montreal Protocol and Chicago Convention). Overall CMG can be seen as an extension of the first pledge and review model with additions which make it both more comprehensive and effective as a multilateral approach.

Table 1: *Options to Address US Participation*

Measure	Likely State of US Legal Participation	Barriers to Implementation
Variable geometry.	Sole-executive agreements on issues where possible/constitutional.	Path dependency of the UNFCCC, risk of domestic political backlash when executive agreements are used.
Non-legally binding nature.	No ratification or executive agreement required.	Political opposition from other Parties to the UNFCCC and civil society.
Pledge and Review.	A sole-executive agreement should be possible depending upon agreement content i.e. the absence of financial commitments and a focus on procedural elements and MRV.	Political opposition, particularly on the basis of lack of ambition.
CAA Section 115.	Implemented through existing legislation and sole-executive agreements.	Risk of domestic political backlash against the Executive. Similar statutory language and mitigation is required in the corresponding state to prove reciprocity. This could require change in statutory language in the other major emitter. This could in turn require a potentially extensive domestic political process.

Varied legality.	Sole-executive agreement(s)..	Political opposition, particularly on the basis of lack of ambition and coherence.

Table 2: *Models for Addressing US Ratification*

Likely Form of US Legal Participation	Scenario	Measures Involved	Bodansky Typology
Legal participation through a single sole-executive agreement.	*Pledge and Review with Varied Legality and Participation,*	Pledge and review, with varied legal elements and participation through optional provisions.	Formalisation of Cancun Architecture with alterations in terms of legality and optional provisions.
Legal participation through numerous sole-executive agreements to different protocols under the UNFCCC and sole-executive agreements to amendments to other existing Article II treaties such as the Chicago Convention and Montreal Protocol.	*Critical Mass Governance.*	Variable geometry through sole-executive agreements to opt-out protocols, voting, bilateral mitigation agreements through CAA S115, sole executive agreements under Montreal Protocol and Chicago Convention.	Modified Multi-track approach.

6.1 Pledge and Review with Varied Legality and Participation

The most likely outcome of a 2015 agreement currently appears to be some form of a pledge and review system with a legal core of institutional and procedural arrangements, and MRV. This would be accompanied by national schedules of non-legally binding NDCs. This could be accompanied by both the national schedules and the inclusion of a number of optional provisions.

Depending upon the content of the provisions and whether they are seeking US participation, these could be legally-binding or non-binding in nature. Such an agreement could be accepted by the US through a sole-executive agreement with opt-outs executed for any provisional elements that would push beyond the constitutional powers of the Executive and/or conflict with domestic US law. Other issues could be elaborated upon, or included, through accompanying or later-in-time politically-binding COP decisions, as was done with the Marrakech accords in relation to the Kyoto Protocol. In essence this is the architecture proposed by the Australian and New Zealand delegations. This model sacrifices treaty effectiveness, to a certain degree, in exchange for US legal participation. A lowest-common denominator treaty with no binding targets and minimal legal elements is unlikely to be sufficiently effective and could lock-in pledges and an institutional architecture which is not capable of meeting the objective of the Convention. Despite this, it is a feasible scenario which could match the existing negotiating text for the Paris negotiations, has existing Party support and would allow for US legal engagement via a sole-executive agreement.

6.3 Critical Mass Governance (A Multilateral and Bilateral Package Approach)

The model of CMG relies on a form of variable geometry that would allow for US legal participation and leadership on a number of issues. It represents a modified hybrid between the model of variable geometry and the fragmented, incremental approach advocated by others (Urpelainen 2013; Falkner et al. 2010). In this case there would be a central legal agreement that covers the institutional arrangements, procedural provisions and core issues such as MRV. This would operate as the core of a hubs and spokes model. In this case the spokes would be a number of opt-out protocols on issues such as capacity building, sectorial approaches, research and development etc. These opt-out protocols would make use of majority voting in order to allow for rapid progress and a dynamic nature. Voting has been shown to be a more effective and efficient decision making process that is also superior to consensus in terms of building consensus amongst parties, due to the absence of veto powers (Kemp 2014; Biermann et al. 2010; McGann 2004; Tijmes-Lhl 2009; Low 2001). Thus it could allow both for speedier and more progressive movement in these strands and, where necessary, prevent the use of US veto power. While consensus is used as a default decision making process in the UNFCCC, a new legal treaty under the convention could stipulate new decision making rules (Kemp 2014). Voting rules for these opt-out protocols would be specified and established under the legal ‘hub’ agreement on institutional and procedural arrangements. The use of opt-out protocols is also critical as empirical studies have shown that states are much more likely to stay in an opt-out treaty rather than pursue ratification of an opt-in treaty due to behavioural biases such as status quo bias (Galbraith 2013).

The split of protocols would allow for the US to legally participate through sole-executive agreements on the different issues outlined in section 2.2. Other protocols would exist on issues that the US could not legally engage with and would simply attempt to create a critical mass of action without the US. Outside of this UNFCCC agreement the US could utilise a bilateral, or series of bilateral, deals through S115 to allow for domestic action and legally binding targets with major polluters that could prove reciprocity (as a hypothetical scenario this is shown as a bilateral deal with the EU in Figure 2). This would compensate for the lack of binding targets within the central UNFCCC agreement. Sole-executive agreements on HFC regulation through amendments to the Montreal Protocol[4] and reducing aviation emissions through the Chicago Convention could be part of a broader multilateral package. Overall CMG is a multilateral package made up of three components: the UNFCCC hubs and spokes style agreement (see figure 1); the use of S115 to allow for domestic action and a binding cap for the US and other major emitters (see Figure 2); and the use of presidential-executive agreements on amendments to the Montreal Protocol to reduce HFCs and to reduce aviation emissions through the Chicago Convention.

[4] The US along with Mexico and Canada have already put forward a '2014 North American Amendment Proposal to Address HFCs under the Montreal Protocol'.

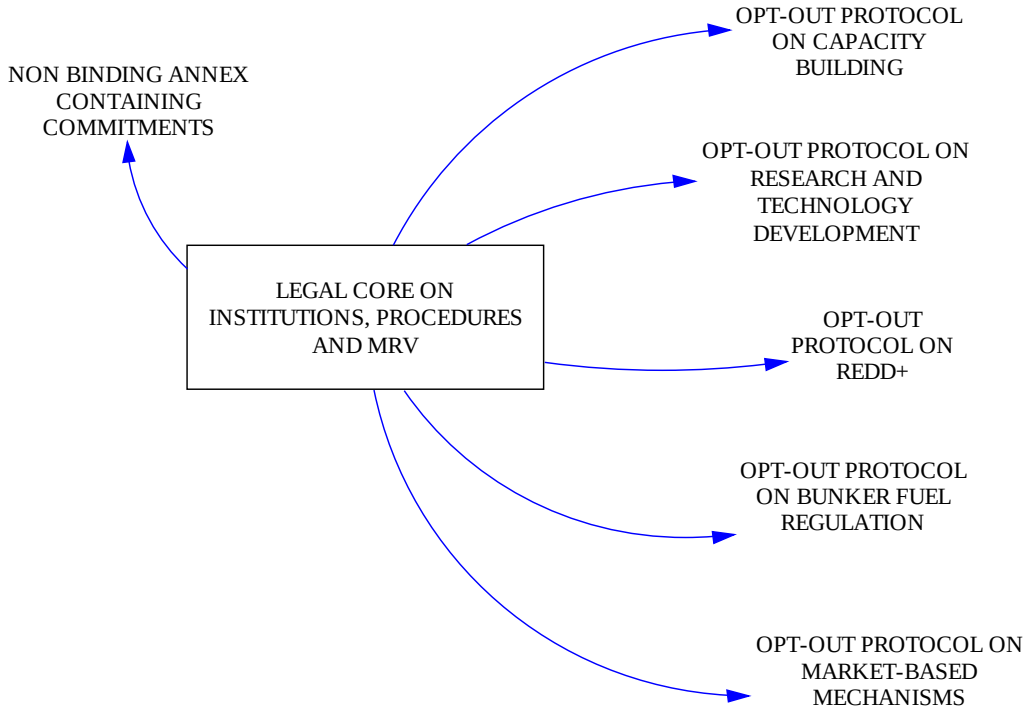

Figure 1: *UNFCCC Component of CMG*

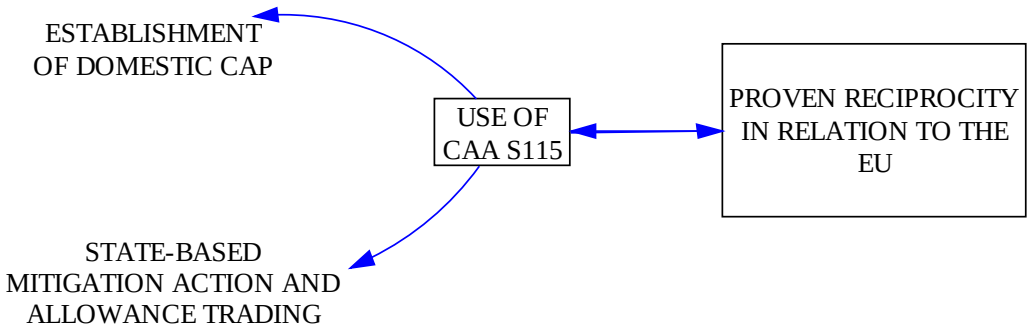

Figure 2: *CAA S115 Component of CMG*

CMG would operate by the same rationale as the incremental proposals that encourage coalitions of the willing on individual issues. Thus CMG is not just designed to allow for maximal US legal involvement, but also to create a generally effective and flexible structure.

The main limiting factor for this model is the political will of the US Executive, particularly given that such a move would likely engender reprisals from the Republican dominated Congress and Senate such as funding cuts to the EPA. Yet this would fit the current situation of US politics which is marked by an obstructionist, Republican dominated, Congress and Senate coupled with a climate active Presidential administration that is testing the extent of its executive powers. However in the shorter term the executive cannot simply skirt the Senate and/or Congress with political impunity (Krutz and Peake 2009; Peake et al. 2012). As mentioned previously in section 2.2 both a future Executive and Congress have the ability to abolish a presidential-executive agreement domestically. However, that in itself would risk a political backlash and in the longer term it is likely that burgeoning state based action along with increased public pressure, heightening climate impacts and rising oil prices will push the US to further engage internationally (Christoff 2006).

A second key limitation is the path dependency of the UNFCCC. CMG is a significant departure from the existing practice of the UNFCCC and its previous protocols and decisions which relied upon interlinked, consensus decision making. However, changing decision making patterns and negotiating practices are not uncommon. Moreover, CMG can be seen to be a more effective and extended version of the politically feasible first model of modified pledge and review. If the international community wants an effective climate treaty with US legal involvement then some changes to the traditional approach are necessary.

7. Conclusion

The US ratification straitjacket is not necessarily a negative barrier: it is a neutral condition indicative of both US politics and the seriousness with which they take international commitments. The key is to design the international treaty to allow for the use of sole-executive agreements and the exercise of executive powers without undermining its effectiveness. CMG appears to provide an optimal and comprehensive model which could allow for sole-executive agreements on a number of important issues, whilst maintaining a flexible and effective overall structure. Importantly it is a holistic approach which goes beyond the UNFCCC to incorporate complementary bilateral actions through S115 and actions under other international agreements. These findings suggest that a wider view should be taken of international environmental

agreements. If environmental agreements are to overcome the US ratification straitjacket then there needs to be consideration not just of international architectures, or domestic US politics and tools for legal engagement, but also how the two interact.

With a long-term view, and use of the right mechanisms, the US ratification straitjacket need not be a fatal hurdle to global climate policy. The tools exist to learn from Kyoto and deal with US legal participation. However there are limits to what any instrument can accomplish and most of the options outlined here depend significantly upon the political will of the President. But given the improbability of Senate ratification in the near future, relying on the currently active Executive appears to be the only way forward in achieving US legal participation in an effective climate treaty. If the President does have the will to make use of these tools then Paris could be the start of a brave new world for climate policy with the US, rather than a second Copenhagen.

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