From Kyoto to Paris

A process tracing case study of environmental regimes

Abstract

This is a case study examines a possible regime shift between the Kyoto Protocol and the Paris Agreement. The study is using a theory consuming approach, with process tracing as the main instrument of analyzation. Using Keohane & Victor's theory on regime complex, the two different regimes are highlighted: Kyoto and Paris. Applying Abbot, Green and Keohane's theory on Organizational Ecology, help with providing interesting insights as to the causes of the shift in global environmental governance. Looking at causes for shifts in the regime, the private sector plays a central role. A framework is built by lending a model from natural science on Regime Shift, by Folke et.al. Based on the model, process tracing can be used which identifies several conferences in between Kyoto and Paris. COP 20 in Lima, COP 17 in Durban, and COP 15 in Copenhagen are shortly examined, and defined using the theories states above. The study focuses on a macro perspective on the governance of the Conferences of Parties.

Keywords: case study, process tracing, regime shift, UNFCCC, COP *Number of words: 10 185*

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1 Introduction

Is there a way to identify different regimes within the United Nations Framework for Convention on Climate Change, and the Conference of Parties?

Looking at international environmental governance, a lot seems to have happened over the years. The first legally binding agreement on climate change was adopted at Kyoto in 1997. In recent years the Paris agreement was established to replace the Kyoto protocol. This piqued my interest to look into the question if one, therefore, could see these as two different environmental regimes? This in turn raises another question. What characterizes, and causes, different environmental regimes? I therefore set out to write this qualitative thesis to identify the different regimes as well as finding what causes, and triggers, such events.

Using a theory consuming study, I found two theories defining and explaining regime shifts in environmental governance. Keohane & Victor's (2011) Regime Complex defines regime, on a scale, where the two extremes are categorized as being either fragmented, or integrated. Abbott, Green and Keohane (2016) helps provide insight as was to causes these shifts in regimes, in their theory on Organizational Ecology. Furthermore, I found a theory on which a framework can be built a to help map out the most crucial points in time.

Combining the theories, I hope to, not only answer the "if", but also the "how" and "why" of regime shifts in global environmental governance. Using the method of process tracing I hope to find important events leading up to the Paris agreement that can help explain why a potential shift in regime has happened.

1.1 Research question & purpose

This paper will be a theory consuming one. In order to gain a higher understanding of the phenomenon and the course it is taking; three theories will be used to help explain

environmental governance. The case in question will be used to gain a deeper understanding of global environmental governance. This will be done trough asking two different, but linked, questions: Has there been a regime shift in global environmental governance during recent years? And somewhat more ambitiously: What has caused a potential shift in regimes?

2 Background

In this section relevant background will be presented. This includes theories that strengthens arguments relating to environmental regimes, but also background to the cases that are to be presented.

2.1 The formation of UNFCCC

Even though the theory on greenhouse gases was presented by the end of the 1800s it remained a scientific issue for a long time. It took almost a hundred years for it to become a political issue. In 1979 the first attempt to address the subject on the international arena was made, in Geneva during the World Climate Conference. This however, turned out to be unsuccessful and another try was made again in 1985 to hold a major workshop on the issue, but because government representatives participated without any clear instructions the result was fizzled out (Bodansky, 2001).

During the late 1980s the concern for climate issues started to grow and both the United States Congress, and the UN General Assembly started raising the issue more often. As a result of this, The Intergovernmental Panel on Climate Change (IPCC) is set up in 1988. The first report of the IPCC came in 1990 which coincided with the same year as the second World Climate Conference. For this conference several ministers and, in some cases, head of states came to discuss the matter and called for an international treaty on clime change. In the end of 1990, the UN General Assembly therefore established the Intergovernmental Negotiating Committee (INC) (Bodansky, 2001). Over the course of two years, the Intergovernmental Negotiating Committee held its' meetings, finally adopting the text for a Framework Convention on Climate Change (FCCC). At the 1992 Earth Summit in Rio de Janeiro, the UNFCCC was opened for signatures. Under the umbrella of UNFCCC, a yearly conference is held called the Conference of Parties (COP). The Conference of Parties have over the years spawned both the Kyoto Protocol, the first legally binding agreement on climate change, as well as the Paris Agreement (Kuyper et.al, 2018).

2.2 Empirical background

According to Agrawal & Lemons (2007) a revolution is taking place in the way environmental governance is carried out. The causality of this revolution is believed to be the "shrinking state", meaning that more power and influence is allocated to the community and market, rather than being maintained at a state level. The results of this multi-agency type of governance are what is described as hybrid-governance.

The authors precise four different forms of this emerging hybrid-governance. The first is *co-governance*, which is the result of governance between state agencies and the community. The second is *public-private partnerships* and is resulted by governance between state agencies and businesses. Thirdly *social-private partnerships* are the result of governance between businesses and community, such as non-governmental organizations. Lastly the *multi-partner governance* incorporates all of the partnerships above, creating a sort of trinity of governance.

This study indicates that a shift in environmental regimes is taking place, and also provides a causality for such a shift. This paper, however, does not seek to argue around this specific theory, but it could indicate that some kind of change is taking place on the international arena of environmental governance. This, in turn, sparked an interest of examining the subject closer.

Meyer et.al (1997) presents a definition for *environmental regime* that coincides with the discourse of *regime* this paper seeks to examine. They define "world environmental regime as a partially integrated collection of world-level organizations, understandings, and assumptions that specify the relationship of human society to nature."

They see the rise of a global environmental regime, not through states or economic incentives, but rather trough discourse and non-governmental organizations. The result of this has later become international treaties and intergovernmental organizations. Two forces drives a global environmental regime. Firstly, a longstanding logical and reliable scientific interpretation,

which in turn structures concerns and problems of common environmental problems. Secondly, the formation of international associations, mainly the United Nations system, where agendas are open to broad concerns such as the environment.

Moving forward, the definition of environmental regime presented above, follows the discourse of "regime" presented in this paper. The shift that is taking place may present a challenge in itself, and it would therefore serve to an advantage to specifically look closer at the United Nations, and the regime within this system.

2.3 Previous research

In the following section, the theories being consumed in this paper will be actualized. However, only two of the theories will be used for theory consuming. The latter one called "regime shift" will rather be used to build a framework (or model) upon, something that will be further described under that same heading.

2.3.1 Regime complex

Keohane & Victor (2011) describes the regime complex of environmental problems. With background to the difficulty of implementing an integrated international institution, the regime complex describes the integration, or fragmentation, of international institutions. On one side of the spectrum, we find integration, that often means focusing on a single legal instrument. On the other side, fragmentation means focusing on a wide array of fragmented arrangements.

The disparity between, international institutions' integration, and fragmentation is described trough three general forces. Firstly, distribution of interests is caused as actors call for a strong singular institution, in order to gain the strength of co-operation. At the same time, there is strong disagreement in the form of this institution, for example, in what way it operates, or what regulatory effects to operationalize. This depends on the actors' own interests, meaning that opinions may vary as interests does.

The second force is uncertainty. As actors seek international co-operation to better the environment, the future of gains and risks is highly uncertain. When seeing the enlarged influence of corporations, governments struggle harder to suggest implementations, and heightens the unwillingness for commitments to international agreements. In turn, this could lead to smaller constellations of states, with similar interest, co-operating in the way that they see fit.

Thirdly, linkages define the wideness of an issue area. As an institutions' assignments can be expanded or contracted, as attitudes for calls for intervention changes. For example, institutions focusing on world trade can be expanded into new areas, as linkages between trade and environmental problems are found.

2.3.2 Organizational Ecology

Abbott, Green and Keohane (2016) argues that institutional forms of global governance has changed a lot during the latter years. The reason for this is the emergence of new different, informal, types of institutions. Among these are transgovernmental networks and private transnational regulatory organizations (PTRO). While the formation these institutions has skyrocketed, the formal institutions has seen a decrease in formations.

PTROs are founded, and governed, by actors from civil society, business sectors and other sectors that it not included by governmental activity. These new informal institutions are thought to be a response to the increasing institutional fragmentation of global environmental governance. Almost all of the climate focused PTROs accounted for in this study, was started after 1997, which is when the Kyoto protocol was signed. PTROs has different ways of claiming legitimacy, provide different kinds of involvement in politics, are accountable for different areas of ecology.

The main comparison is made between, the formal, intergovernmental organizations (IGOs) and the informal, private transnational regulatory organizations (PTROs). To explain the success, or failure, of the forms of organizations, the authors look at legitimization and competition. PTROs are proven legitimate by the fact of rapid of growth of such

organizations. As the interest and founding of PTROs is still rising, the authors argue that there is yet little, or no, competition. However, resources are limited and at some point, the niches will be fully occupied.

To compare these, they look at the three key concepts, organizations, populations- and niches and, organizational density. From the comparisons three conjectures can be made. The first conjecture is that "Private transnational regulatory organizations will have lower entry costs than intergovernmental organizations". The second, "Intergovernmental organizations will expand their activities to fill their domains, while more flexible private transnational regulatory organizations will strategically seek favorable niches". Finally, the third conjecture is that "Private transnational regulatory organizations will strategically forge complementary relationships with intergovernmental organizations, enabling them to gain legitimacy and other resources". The conjectures are off course proven empirically and will from here on be called key concepts.

2.3.3 Regime shift

Folke et.al. (2004) presents a theory to describe regime shifts within different kinds of environments. As an example, the theory describes the shift from clear-water lakes into turbid-water lakes. The strength of this theory lays within the model of describing, and mapping out, the regime shift.

The discourse surrounding regime in this theory is not necessarily the same as the discourse that this paper describes. However, as figure 1. shows, the regime shifts are mapped out after the causes has been described. Firstly, two stable states are put into the model on the first and last sections of the figure. The stable states differentiate in the way that a regime shift has taken place in between them. In the third section of the figure the triggers are identified and put into the model. Once the cause has been identified it is put into the second section. The causes behind the shift in regimes is what gets the ball moving. The trigger is the point in which the regime shifts and makes the ball tip to the point of creating a new stable state.

This theory is based in natural science. However, the model will be used in this paper to create a scheme in which theories and cases can be placed. Once the theories are placed in the scheme, the same mechanistic thinking can be applied, with no regard to what discipline it is being used on. In that way, it creates a structure in the work that can later be used to set headings within the paper as well as making it easier to identify the tipping points (or shifts) in regimes. The model is a tool that works well when using process tracing (describer further under the "Method" section).

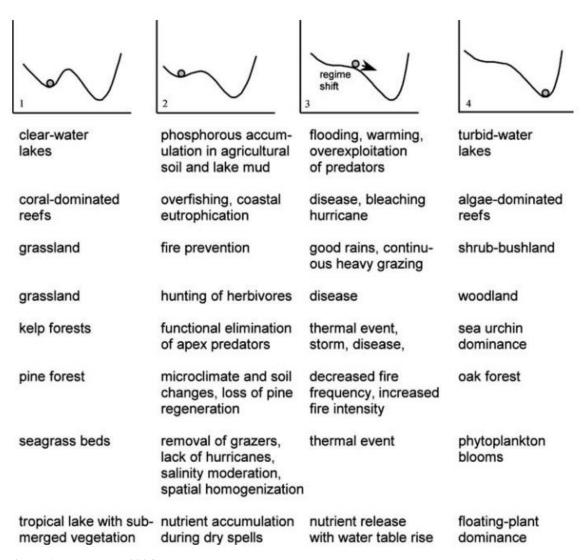


Figure 1 (Folke et. al 2004): Alternate states in a diversity of ecosystems (1, 4) and the causes (2) and triggers (3) behind loss of resilience and regime shifts (Folke et.al 2004).

2.4 Cases & limitations

Choosing what cases to include in this study was somewhat of a challenge. On the one hand an important start of the environmental regime could be to start at the very first UN conference relating to the subject – Stockholm 1972. However, within the theory on organizational ecology, the Kyoto protocol is a central point. The Stockholm conference in 1972 was regarding sustainable development, while the Kyoto conference was regarding climate change.

In the interest of keeping continuity between cases, this paper will therefore solely focus on conferences regarding climate change, more specifically conferences within the United Nations Framework Conventions on Climate Change. The most important conferences to look at will therefore be the Paris conference in 2015, and the Kyoto conference in 1997. These are chosen for two reasons. Firstly, they will best help explain the theories being consumed in this paper. Secondly, an assumption is made that these two cases represent three different environmental regimes, something that will be elaborated under the "Theory" section. The choice of cases makes this paper a multiple case analysis and will be further explained under the "Method" section.

Another important point is that I will look into the governance process of these conferences. This means that I will not be rating any of the conferences outcome in relation to the effect it has on the environment.

3 Theory

Using the theory of Regime Shift by Folke et.al (2004), the same scheme (or model) will be implemented here. Using the two cases as different stable states, they are put into the first and last (fourth) figure of the scheme. In the third figure, triggers are to be put in. As this paper focuses on consuming two theories, one of them are put in as the trigger, being the theory on Organizational ecology. Within the second figure the causes are to be put in. The causes would answer the "what and why" of the regime shift and is therefore left blank for now. As the analyse is completed, the causes will then have been identified, completing the scheme. In order to confirm the stable states of figure one and four, the theory on Regime complex will be used to describe the different states in time. The explanation above is illustrated in figure 2. and will be the structure of this thesis.

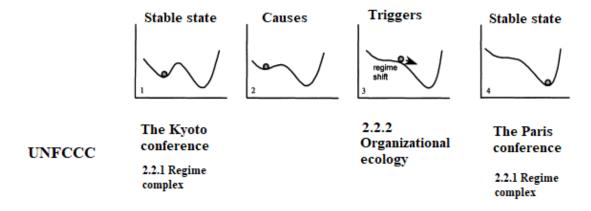


Figure 2: Alternate states in global environmental regimes (1, 4) and the causes (2) and triggers (3) regime shifts.

As Kyoto is the first legally binding international agreement on climate change (Böhringer, 2003) it would seem reasonable to put it in the first "stable state" as it would mark the start of the first regime. The Paris agreement is the successor of Kyoto, and also is stated to abandon "the Kyoto Protocol's paradigm" (Streck, 2020). It would therefore seem natural to consider the events in Paris as the second stable state, and the start of a new regime. To test the theory if these events can be considered two different regimes, I will use the theory on Regime Complex (Keohane & Victor, 2011).

Using Organizational Ecology (Abbott et.al, 2016), I want to investigate the important role that PTROs, and the private sector in general, have played in the creation of the new agreement. This is therefore put in as the trigger for the regime shift.

Using the method of process tracing, I will then start at the Paris conference, and trace the process back to find any eventual causes for such a regime shift. For this reason, the third figure called "Causes" will be left unchecked. Once the causes have been identified I will include those in the figure under the section called "conclusion".

Using this framework, I want to press the importance that the theory on Regime Shift (Folke et.al, 2004) will be used solely to organize the different points. The theory itself will not be consumed in that manner. Something that should become clearer as the reader sees the headings under the section "Analysis".

4 Method

This paper will be theory consuming as existing theories are being used. The reason for not testing theories is because, I am not aiming to test the empirical value of the theories in question. Instead, the cases are the focus as the paper aspire to explain what happened within and in between the climate summits. Worth mentioning is that there is a descriptive element to the study as well. This because it seeks to classify the cases in the model illustrated in the "Theory" section (Esaiasson et.al, 2012).

As a method of analyzing, I will be using process tracing. The idea is to trace the mechanisms in a process, in this case historical, in order to identify the causes and effects. In order to do so the cause needs to be identified through the theoretical framework. Even more the framework should create an opportunity to observe implications in between the mechanisms (Teorell & Svensson, 2007).

The strength with process tracing is that it is a way to obtain information on a specific subject, identifying the key actors. As the theoretical framework has been designed in a specific way random sampling is not possible, as is often the case in process tracing. This due to the fact that the important parts surrounding the events needs to be chosen specially rather than at random. This could limit ability of generalization (Tansey, 2007).

To identify causes and effects, comparisons need to be made. For this reason, the paper is a case analysis. Using the cases, two comparisons can be made, making this a multiple case analysis. Because the two comparisons are within the same context, looking at regime shifts in environmental governance, but at different points in time this will be a traditional case study, as opposed to a comparative one (Esaiasson et.al, 2012).

The idea behind a case study is to create a robust empirical description of selected instances, in order to inductively reach a conclusion. Using multiple cases opens up to a more elaborate exploring of the research question. Adding more cases to a study often results in a higher degree of generalization and replication (Eisenhardt & Graebner, 2007).

4.1 Material

As representatives of the different nations, and organizations, at the climate conferences want to be perceived as legitimate as possible, it would be hard to get an objective outcome by looking into the protocols. The material used in this paper will therefore be scientific papers describing the events. As the method used will be process tracing, the material can not be chosen at random. However, as one event leads to another, the cases will not necessarily be chosen entirely freely. This is rather decided by what happened in another event.

4.2 Operationalization

Using the theory on regime complex I aim to identify the two different regimes that are mapped out in the "Theory" section, describing the state of the regimes as either more fragmented or integrated. In order to make such an identification the three driving forces, distribution of interests, uncertainty, and linkages will explain why the state is either fragmented or integrated. An important note to keep in mind is that integration and fragmentation are two extremes, meaning that it will never be fully integrated nor fragmented.

As PTROs operate through markets rather than interstate negotiations and hierarchy (Abbot et.al 2016), the founding of such organizations would not have been possible without mobilizing market-based instruments to combat climate issues. The argument is confirmed as PTROs barley existed before 1992 and the creation of the UNFCCC. With the background to this theory, I will therefore look at the role of *private actors* throughout the regime, hopefully finding the cause to the shift. Furthermore, the key elements presented in the theory, can help explain specific cases of PTROs.

5 Analysis

5.1 The Kyoto conference and the Regime Complex

The Kyoto Protocol, adopted at COP 3, is not only the first legally binding international agreement on climate protection, but also "constitutes the first international environmental agreement that builds on market-based instruments to determine cost-efficient responses to the undisputed need for GHG abatement." (GHG=greenhouse gases). The argument is based in the implementation of tradable pollution rights. Three flexible instruments are identified, being international emissions trading, joint implementation, and the clean development mechanism (Böhringer, 2003). Simply put, this is a top-down global market in which actors can buy and sell emissions rights within the frames of their agreed allowances emissions (Prins & Rayner, 2007). Opponents to the Kyoto agreement, however, sees it a widely impractical and inefficient, both in an economic as well as a political sense (Böhringer, 2003). Arguing from the point of the regime complex and its driving forces (Keohane & Victor, 2011), the eventual impracticality of the agreement should be highlighted.

McKibbin and Wilcoxen (2002) argues that a treaty that makes heavy claims to national sovereignty or requires large economic transfers between the developed and the developing world, is likely to not be ratified. Even if ratified, it would probably be renounced at some stage later on. During the time of the Kyoto agreement, a central question was which countries should be held accountable for climate change. While some argues that the developed countries cause most climate change through emissions and should therefore take responsibility for it, others argue that developing countries still increases emissions and that it cannot be stopped without participation from the developed world. Furthermore, scientific uncertainties regarding climate change polarized the public debate. Some believed that no action should be taken until these uncertainties can be proven, while others argued that

something needs to be done. The information gained can be explained through all the three driving forces, presented in regime complex (Keohane & Victor, 2011). *Distribution of interests* would give an answer to why claims to national sovereignty cannot be ratified. Developing countries have their own self interest to not ratify agreements that would impose on their sovereignty or economy. *Uncertainty* could be the reason for developed countries reluctance to making costly commitments, as there would be no guarantee that other nations would honour those commitments. Finally, *linkages* would explain why some want to hold off on committing to climate goals until scientific uncertainties can be proven. To elaborate, the argument is to wait and see if science can prove any linkages between Anthropocene and climate change.

Another important point when looking at the Kyoto Protocol, is that the senate of the United Stated voted unanimously on *not* ratifying the protocol, meaning that USA did not abide by the Protocol. The reason was stated to be "(a) impose mandatory greenhouse gas emissions reductions for the United States without also imposing such reductions for developing nations, or (b) result in serious harm to our economy". The reason for this, some claim, is a result of intense lobbyism by the fossil fuel industry which caused the US to not ratify the protocol (McCright & Dunlap, 2003). The fact that the United States did not ratify the Kyoto agreement, points to a redistribution of interests. Keohane & Victor (2011) explained the lack of agreement as, differences between the EU and the US. Interests also shifted within the parties of the Kyoto agreement, focusing more on market-based solutions as a possible result off the addressing hybrid governance solutions. As mentioned above, actors surrounding the Kyoto protocol saw it as unfair to impose carbon reductions only on developed countries. At the same time, the developing countries where reluctant to agree to limiting emissions without payments through the market-based mechanisms (Keohane & Victor 2011). Some level of uncertainty can be read from that statement, as it could have meant economic consequences for a developing country, if developed countries decided not to abide by the Kyoto protocol.

The Kyoto protocol became mostly symbolic because, as mentioned above, it placed no obligations on developing countries and the US did not ratify the agreement (Kehoe & Victor, 2011). The fact that only 37 states partook in binding agreements on *reducing emissions*, points to a *fragmentation*. Furthermore, the states that partook represented only around 20 percent of the total emissions, and these in turn only agreed to limit their emissions by approximately 5 percent. Following the Kyoto agreement there where

several withdrawals of the agreement, up to 2012 when the first part of the Kyoto agreement expired (Hovi et.al. 2016).

At this stage it could be deduced that the international community, under the umbrella of the UNFCCC, was more *fragmented* than integrated. This because the result was a difficulty to impose regulations trough comprehensive and hierarchical rules (Keohane & Victor, 2011). Difficulties with the interests of nations were widely distributed, both among the developed and developing world, but also between the US and Europe. With no guarantees to honor commitments *uncertainty* lurked within the community. The scientific community did not have the same claims to climate change as they do today, leading to less *linkages*.

5.2 The Paris conference and the Regime Complex

The Paris agreement, agreed upon during COP-21, leaves the paradigm set with the Kyoto protocol regarding binding emissions targets, and instead focuses on voluntary contributions. It was characterized with a higher level of willingness to co-operate and compromise, and that was only the second most protruding thing about the summit. In Paris, the private sector had a more prominent, public, role in organizing and decision making, making it more visible than ever before. One third of the two thousand biggest companies committed to the action decided upon in the Paris agreement. This is actualized in the fact that the companies that did commit, had a market value of that to the combined GDP of China, Germany, and Japan (Streck, 2020).

In the years leading up to the Paris agreement a lot more investments had been made into, among other, renewable energy sources. The biggest investment was made by China in 2014, which, in 2006 became the biggest emitter of carbon dioxide. A big reason for these investments is due to the fact that the transition to low-carbon energy sources turned out to be a lot easier than originally thought. This because more carbon-reducing and energy saving policies has been put into place, leading to greater technological advancements, market competition and heavy economies that has pushed down the costs of such technologies. Another important remark is that both the Chinese

and the US governments signaled a higher willingness to commit to agreements reducing greenhouse gas emissions (Falkner, 2016).

Many positive outcomes came as focuses shifted from the top-down regulations, seen in the Kyoto protocol, to the bottom-up approach of voluntary pledges. One being the inclusion of more determined temperature targets, where the Pacific Island states managed to set the 1,5-degree target as an aspiration. Because of the long-term targets set in the Paris agreement an important signal was sent to the global market and to institutional investors. The biggest problem with the fragmentation of the Kyoto protocol was also solved by leaving it to the individual countries to decide how much they want to contribute. By creating a mandatory reporting every five years, an element of transparency was also included that creates trust between the parties. Maybe the most important point is, that the voluntary pledges also solved the divide between developed and developing countries. This time it was recognized that climate change poses a bigger challenge to poorer societies, underlining the international financial aid would help developing countries, while at the same time recognizing the importance for emerging economies would contribute to climate change (Falkner, 2016).

It would seem that at COP-21 the state of the environmental regime was a lot more *integrated* than during COP-3. According to Keohane and Victor (2011), the outcome of more comprehensive regimes is to be expected when the interests of powerful actors are similar across a broad issue-areas. This would lead to a demanding of a singular international institution to gain the benefits of cooperation. As would be the case here, looking at the willingness of China and the United States to cooperate and invest resources. This points to the driving force of "distribution of interests, weighted by power" (Keohane & Victor, 2011). In this case the willingness to gain benefits of cooperation made the possibility to compromise easier, as seen in the case above with the Pacific Island states.

The force of *uncertainty* that arises from risks of regulations not coinciding with the gains of those regulations, is solved by the mandatory reporting system. Creating trust between the parties, and at the same time minimizing risk trough the voluntary bottom-up approach, is an important reason for the Paris agreement being more *integrated*. The force *linkages* could explain the role of the private sector. The prominent role of the

private sector in the Paris agreement is a fact, as well as willingness to cooperate once the transition to low carbon-energy sources has become less costly. The link between free-market forces and the environment therefore seems to have created an opportunity for deeper cooperation (Keohane & Victor 2011).

Looking at the commitment, the Paris agreement was adopted by 196 countries (Streck, 2020). Almost all parties in Paris came prepared to offer voluntary action, that was in accordance with their own self-interests (Robbins, 2016). This is in line with how Keohane & Victor (2011) would operate to gain a higher level of *integration*, as it focuses on uniting the parties despite the *distribution of interests*.

From the viewpoint of the regime complex, Kyoto and Paris could identify as two different regimes. Learning from earlier conferences a new way of cooperating was implemented during the conference in Paris. The different nations own self-interest had not necessarily changed but looking at the three forces from the regime complex, a framework was created that could include all nations, no matter the interests of one's own nation. In short, the fragmentation was used to create a new state that brings the global environmental regime closer to a state of integration. The theory of regime complex helps identify the state of the two different regimes, but surely there are other forces at play. Moving forward, the thesis will look closer at forces that caused the regimes to shift.

5.3 Organizational Ecology

One of the reasons for the success at COP 21 in Paris was the preparatory meetings leading up to the conference. Following the failure of Copenhagen 2009, where the Danish presidency was blamed, French presidency invited states, but more importantly for this case, business leaders and NGOs. Once the conference started, many parties were confident that an agreement could be reached (Falkner, 2016). As earlier mentioned, one third of the two thousand biggest companies committed to the action. Furthermore, during COP 21 there was a conference hosted simultaneously, "Climate solutions hub", that discussed concrete solutions to different environmental problems.

What categorized this conference was that the solutions were initiated by businesses, NGOs, and civil society actors (Hsueh, 2017). The inclusiveness of the private, and substate, sector during COP 21 could be seen as legitimizing the need for the private sector to take responsibilities trough regulating their own sectors. After all, no single country has the power to impose solutions onto another (Keohane & Victor, 2011), while private agreements need to be followed as the contract states.

One of the key themes of COP 21 was also the important role of finance to enable resource efficient, low carbon transition. For this reason, the Lima Paris Action Agenda (LPAA), founded at COP 20 in Lima to build momentum to until COP 21 in Paris, held a half-day of round table discussions and presentations which was titled Focus on Private Finance. The themes of the day were on how to better enable private financing to work with the current environmental governance (McInerney & Johannsdottir, 2016).

The inclusion of the private sector started with the Kyoto protocol as stated in article 13, regarding parties of the protocol. Article 13, point 8 states that "The United Nations, its specialized agencies and ... observers thereto not party to the Convention, may be represented at sessions of the Conference ... Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by this Protocol and which has informed the secretariat of its wish to be represented at a session of the Conference..." (UNFCCC, 1998). The Kyoto protocol also enables parties to seek support from non-governmental actors in order to reach implementation. The Clean Development Mechanism, as well as the Joint Implementation are implemented as an explicit role seek participation by the private actors, by mobilizing its' financial and operational abilities to generate emission reductions. (Streck, 2020).

Abbott et.al (2016) identify Private Transnational Regulatory Organizations (PTROs) that pursues broad environmental, social, or climate mitigation goals to follow the temporal trajectory of being founded since 1997. There are only three exceptions of PTROs that were founded before that, and most were founded after 2000. At the same time founding of Intergovernmental organizations has remained almost the same. Looking at the information of the Kyoto protocol above, and comparing it to the Paris agreement, the inclusion of the private actors seems to have created a greater sense of responsibility within the private sector. At the same time the governmental sector seems

to have stayed in the same course, leaving more space of PTROs to fill. This also coincides with Abbott et.al (2016) second key concept "Intergovernmental organizations will expand their activities to fill their domains, while more flexible private transnational regulatory organizations will strategically seek favorable niches"

In 2014, the government of Peru during COP20, in conjunction to the UNFCCC, launched the Non-State Actor Zone for Climate Action (NAZCA). While not a PTRO in a conventional sense, it is a web portal for where companies, investors, cities, and subnational regions can display their commitments to address climate change. Its' role is to collect data of actions related to mitigation and adaptation by nonstate (and substate) actors. By the mid of 2015, more than 2000 companies and financial organizations had made voluntary commitments to action against climate change. Among the 2000 companies, 267 of them included the 500 biggest companies in the world measured by revenue (Hsueh, 2017). According to the organization it helped build a momentum for the Paris agreement, as the nations were more inclined to accept compromises, knowing that their companies, cities, and regions stood behind the agreement (Global Climate Action NAZCA, website).

This can be explained trough in the comparisons and the key concepts made in Organizational Ecology (Abbott et.al, 2016). The first key concept, that PTROs have lower entry costs and therefore should have a higher birthrate than Intergovernmental Organizations (IGOs) seems to be true in this case. NAZCA was created in 2014 and had by the end of 2015 already reached its purpose of committing actors in preparation of the Paris agreement. As comparison, Abbott et.al (2016) looked closer at the Adaptation Fund (AF), which was created in 2001 to direct two percent of the profits from the Clean Development Mechanism (established at Kyoto). It took until 2007 until the parties had agreed on its governance structure. In 2008 a board for the AF was established, and it took until 2010 for the AF to approve its first project. Even in 2015, the AF did still not operate with the sufficient funds intended at creation. Comparing the timeframe between the (Intergovernmental) Adaption Fund, and NAZCA the difference is remarkable.

The second key concept states that, since PTROs operate in a tinner institutional environment than IGOs, it will shape their environments and dictate their response to

environmental constraints. As competition among PTROs would mean the death of the organizations, they will strive to find niches in which they can operate freely or actively collaborate. This is the key concept that Abbott et.al (2016) calls "institutional density and Niche-finding". In the case of NAZCA, it was created with the purpose of gaining momentum up until the COP 21 conference in Paris, by collecting a database of private and substate actors. The niche that NAZCA has found, in this case, was working with the private actors interested in the Paris agreement and categorizing them by creating a database. Easily put, while the intergovernmental side focuses on the "big picture" - cooperation between nations - NAZCA focuses on a specific group of actors.

The third key concept, made by Abbott et.al (2016), is that PTROs will gain legitimacy and resources trough forming relationships with IGOs. Different domains in IGOs activities will get an increased presence of PTROs in those same domains. While PTROs compliment IGOs they differ in what targets they have. The third key concept is also the one most visible in NAZCA. As it is created by a government, together with the UNFCCC, it has strong connections to the actual IGO (that is UNFCCC) which, in turn, gives it a high level of legitimacy. More so, the companies that signed NAZCA got some level of publicity (one could expect). The funds to create NAZCA also came from IGOs, but at the same time, as it focuses on transnational regulation between non-state actors the real regulatory features came from private actors. While focusing on the same goals as the Paris agreement, and with the same bottom-up approach, it can be closely linked to the domain of UNFCCC.

In Organization Ecology, Abbott et.al (2016) also states that the institutional revolution of the expansion and greater role of PTROs has potentially important consequences for future climate governance. Priorities of private actors and governments may differ, meaning that the reasons for transnational regulation may be different. On the one hand, it may give governments less reason to implement costly regulations. On the other hand, private actors may promote weaker regulation to engage in oligopoly or monopoly and preempting public regulation. While providing opportunity for "civil society, business, workers, technical experts, and other private actors", PTROs tend to avoid government control.

The UN Environment's Climate Adaptation Gap Report, however, states that the adaptation costs exceed public finance by two to three times. In the near future that gap is expected to rise to six to thirteen times. In response, the transnational cooperation and adaption of the private sector can help fill that gap in terms of financing, but also in implementation, capacity, and realization of emissions reductions (Chan & Amling, 2019). This because, businesses are enablers of those adaptations' trough providing a notable amount of financial support, services, and products. They are also the main driver for economic growth, which is needed especially in developing countries to alleviate poverty which eases the need for financial support to those countries. In that sense they play an active part in developing environmental support systems (Canevari-Luzardo, 2019). The fact that global businesses are seen as capable of achieving results, gives them a higher level of authority and therefore legitimacy (Hsueh, 2017). Furthermore, a report from 2014 by the Climate Policy Initiative states that only 40 percent of investment in low carbon assets came from the public sector, compared to the 60 percent financed by the private sector (McInerney & Johannsdottir, 2016).

5.4 Causes

5.4.1 COP 20, Lima 2014

In conjunction with the Non-State Actor Zone for Climate Action (NAZCA), mentioned above, the Peruvian presidency of COP 20 in 2014 together with the French COP 21 presidency as well as the UN and UNFCCC launched the Lima-Paris Action Agenda (LPAA) (Chan et.al, 2016). With the basis of this, together with the timeframe of being held one year before, I will examine the COP 20 conference, in Lima, closer as a potential cause for the new regime that started at COP 21.

Grubb (2015) states that "Lima was a crucial point on the road to Paris, and in some respects a 'dress rehearsal' for key issues and debates there". The most important point from COP 20 was to, well in advance before the Paris meeting, submit Intended Nationally Determined Contributions (INDCs). This laid the foundation for the voluntary commitments, central to the Paris agreement. Grubb (2015) also means that measuring an international conferences' success is done through looking at expectations, process objectives, or specific goals. COP 20 succeeded in the first two, however not in setting specific goals. This due to the dispersion between developing and developed countries about setting deep or broad goals. Deep would be more of the character seen in the Kyoto Protocol, with legally binding rules, while broad characterizes the Paris agreement, meaning voluntary goals. Since the failure of Copenhagen, broad goals have mostly been pursued.

More importantly, the idea of mobilizing more actors, such as cities and companies, to the cause was born. Inspired by the Climate Summit in New York the same year, the Peruvian COP presidency, and the minister of environment, was strongly committed to the idea of mobilizing more actors and hosted the High Level Action Day that included important mayors and CEOs to make commitments and statements. Numerous references to substate and nonstate actors was included in the draft for the adaption of Lima, but most of it was scratched due to opposition from within the G77. Some countries were worried about it undermining their sovereignty, while others worried about the prominence it would give multinational corporations. The French government, however, became enthusiastic about the idea, and together with the Peruvian government and UNFCCC launched the LPAA (Hale, 2016).

COP 20 was however also seen as a turning point in a sense. This was the last round of negotiations before an agreement was to be struck, according to the previous Durban Platform for Enhanced Action, the agreement set at COP 17 in Durban. While previous rounds had not led to any conspicuous progress, this round ended with some of the essential elements of the architecture later seen in the Paris agreement (Boran & Shockley, 2015).

Looking at the information gathered around the events at COP 20, some events prior to this stands out and should be addressed. Continuing, I will closer examine the Climate Summit in New York, as well as COP 17 in Durban.

5.4.2 Climate Summit in New York

The climate summit hosted by the United Nations in New York was held on the 23rd of September, a little more than two months before COP 20 in Lima. The idea of the conference was that it should work as a catalyst for coming to a more ambitious agreement at COP (Rimmer, 2014). Because this conference was not an actual Conference of the Parties (COP) it is less central to the regime, and this point will therefore be shorter.

What is central to this conference, in the perspective of this thesis, is the statements of the UN Secretary-General Ban Ki-Moon: "We must work together to mobilize money and move markets." and "Economists have shown that this comes at minimal extra cost, while the benefits to our people and our planet are monumental". In those statements, Ban Ki-Moon was referring to both public and private investment (Rimmer, 2014), the idea of private investment, however, seems to have transcended to the more official COP 20.

5.4.3 COP 17, Durban 2011

COP 21 in Paris can be seen as the offspring of the COP 17 conference in Durban in 2011. In Durban, the Ad-Hoc Working Group on the Durban Platform for Enhanced Action for founded with the purpose of developing a legal framework applicable to all parties. Over the next three years the agreement was to be negotiated, until being approved at COP 21 in 2015 (Moncel, 2012). With this background, I will look closer into COP 17 in Durban.

Generally, the Durban Platform was seen as a failure as it ended with no commitments from the largest emitters, and many nations leaving with a lot less than they had hoped

for going into COP 17. For example, Australia stated that it would only be part of a wider agreement, covering all large emitters, and would therefore not commit to a second period of the Kyoto protocol. Canada and Russia made similar statements laying weight on the argument that the Kyoto Protocol did not address the large majority of total emissions. Island State nations on the other hand pushed for immediate action, seeing that climate change affects these states the most. With rising water levels and rougher weather conditions it is directly affecting their land and homes. By many parties of COP 17, it was implied that China, India, and the United States lack of interest created the outcome (Obold et.al, 2012).

In the aftermath of this conference, scholars where divided over which type of framework would gain most success. On the one hand, a strong legally binding framework would gain higher compliance and domestic implementation. On the other hand, voluntary contributions would lead to more ambitious goals and a higher level of participation (Moncel, 2012).

Regarding the role of private actors, they did not have the same central role as in the years to come. This due to the lack of understanding of their roles, and what strengths they could bring to the table. Furthermore, they were not given the same amount of space on the decision-making arena. One of the reasons for that is the geographical distance between the conferences which did not enable those actors to voice concerns and be involved in the environmental governance. Conflict between different sides of civil society groups also resulted in a weak outcome, with uncoordinated and contradictory lobbying (Fuhr et.al, 2011).

Admittedly, at this point the outcome of the Durban platform was hard to judge, as the goal was set to negotiate until 2015 (Obold et.al, 2012). With the seemingly fragmented state of the Durban Platform, one could argue that this would mark the start of triggering events leading up to COP 21 in Paris. However, there is another possible cause I would like to examine closer.

5.4.4 COP 15, Copenhagen 2009

In my readings during this thesis, I have found a number of statements that would suggest that the failure of Copenhagen scarred parties to the level that it would be the reason for the success at Paris (e.g., Bäckstrand et.al, 2015; Falkner, 2016; Hale, 2016; Espagne, 2016; Keohane & Victor, 2016; Ciplet 2015; Bäckstrand & Lövbrand, 2015). Some have gone so far as to state that the process in Copenhagen almost led to a near delegitimization of the UN process (Fuhr et.al, 2011). I would therefore like to examine the possibility, and look closer into COP 15, in Copenhagen 2009.

With the Kyoto Protocol ending in 2012, there was hope that the conference in Copenhagen would produce a new legally binding agreement to combat climate change. World leaders even promised that the summit would produce a new carbon order. However, COP 15 did not produce any international binding agreements and therefore carried no weight and forced no progress. Countries were not required to sign the agreement or abide by the promises made at Copenhagen. The agreement also lacked any guidelines or structure which, in turn, provided no guidance to how countries can make any substantial decreases to emissions. A positive outcome of the conference, however, was short-term pledges of funding from developed countries to developing countries (Inman, 2010).

Another accreditation to the failure of Copenhagen is given to the shutting out of civil society, private actors, and NGOs. As the expected outcome of COP 15 was to reach a new international climate agreement, the participation applications of NGO observers soared. One year earlier, at COP 14, 3 869 applications by NGOs were submitted. Comparing that number to the 20 611 applications for COP 15 made it hard to accommodate all participants. Due to poor planning the max number the conference was able to accommodate was 15 000. This, in turn, led to a system being set up, regulating participation of organizations, but was explained only once the negotiations had started. The access was further limited during the weeks of the conference and in the end many environmental groups, businesses, and researchers could not participate. The role of NGOs as legitimate was also somewhat lost by the protests they organized. Before negotiations began, a call to storm the premise of the conference was posted online, which in turn contributed to the decision to limit the access of NGOs (Fisher, 2010).

5.5 Defining causes with theoretical considerations

Looking at the development regarding the inclusion of private sector throughout the different conferences, it seems to have played a central role of the regime shift of UNFCCC. Relating to the theories of Organizational Ecology (Abbott et.al, 2016), and Regime Complex (Keohane & Victor, 2011), the growth of PTROs can be explained trough the increasing institutional fragmentation. This seem to be true, as when the process is traced back to COP 15 in Copenhagen, the increasing role of the private sector seems to have played an important role in the level of success at coming to an agreement between the parties of COP.

Looking at Copenhagen, the state of the UNFCCC seems to have been fragmented, explained mostly trough the force of *uncertainty*. As the agreement lacked any real legalities, guidelines, or goals, it would make governments wary about making commitments as they would be unsure of the benefits. Furthermore, they would be uncertain whether other countries would honor those promises (Keohane & Victor, 2011). At the same time, private actors were, to great extent, shut out from the process. This would mean not taking markets into account which, in turn, reflects on consumer demands (Abbott et.al, 2016).

In Durban, while the conference seems to be fragmented, it is so to less extent than seen in Copenhagen. The fragmentation in this case would be better explained trough the force of *distribution of interests*. Looking at the statements by Australia, Canada, and Russia, it would seem evident that the problems lie within the biggest and most powerful polluters not committing to international agreements. A problem created by those actors looking out for their own economical *interests*. This in turn creates *uncertainty* for the same reason as Copenhagen. However, instead of *linkages* leading to participant to cling to existing institutions, the parties at Durban decided to keep working towards a new regime, suggesting a lower level of fragmentation (Keohane & Victor, 2011). While not completely shut out, the private actors did not have a prominent role in Durban. However, from the Ad Hoc Working Group the Durban

Platform, Workstream 2 grew, which among other things, focused on potential contributions by sub-national and private actors (Abbot et.al, 2016).

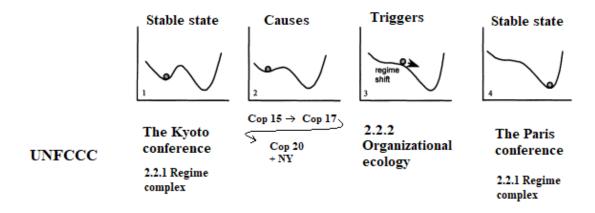
Compared to earlier, Lima, and the conference in New York leading up to it, seemed more *integrated*, perhaps due to the fact that the Paris agreement was to be struck one year later. The conflict, as in most cases throughout this thesis, lie between the disparate views of developing, and developed countries. Due to the gains and losses that different forms of agreements would lead to, the nation's own *interests* once again come in to play, which in turn creates *uncertainty*. However, the *linkages* with private actors had become clearer. In Lima, the need to identify sub-national policy options and involving private actors in the process, was identified (Abbott et.al, 2016). This is seen through the Lima-Paris Action Agenda (LPAA) and the Non-State Actor Zone for Climate Action (NAZCA), which this thesis argues are the triggering factor for the success of the Paris agreement.

Finding a clear causing moment where the regime shift would not be possible as, "scholars have argued that regimes can evolve gradually and that small steps can have significant effects over time" (Moncel, 2012). Instead, from the information gained throughout this thesis I would like to argue as such: Copenhagen was seen as a huge failure to such an extent that it comprised the legitimacy of the UN process. Following the "Copenhagen hangover" the nations was determined to not make the same mistake twice. With a continued fragmentation, the Durban Platform launched a process that created new linkages with negotiations leading up to the Lima conference. Determined to create a framework, on which all parties could agree, the LPAA and NAZCA was launched, leading to the Paris agreement.

6 Conclusion

Several conclusions can be reached following the analysis section. Firstly, while the Kyoto protocol should be seen as a success, being the first legally binding agreement on climate change, the state of the UNFCCC and the Conference of Parties was *fragmented* at this point. Comparing the Kyoto Protocol to the Paris Agreement, it is clear that the paradigm of Kyoto was left to focus on a new one. At the Paris Conference, the state was instead identified as being more *integrated*. From the viewpoint of the theory Regime Complex (Keohane & Victor, 2011), these could be seen as two separate regimes.

From the viewpoint of the theory on Organizational Ecology (Abbott et.al, 2016), the importance of private actors in global climate governance is highlighted. Starting at Kyoto, private actors have gotten more influence over the years. The key concepts helped explain the specific case of the Non-State Actor Zone for Climate Action, and why such initiatives are important for the future of the climate governance. Using Organizational Ecology as the trigger for the success of the Paris agreement, I was able to trace the process back the different causes during earlier years.



Starting the process at COP 21 in Paris and trace it back to COP 15 in Copenhagen, COP 20 in Lima (with the New York Climate summit), COP 17 in Durban, was all identified to be causes for different reasons. The illustration shown in the "Theory"

section can therefore be filled in completely (see above). On an ending note, there seems to have been a shift in regimes between Kyoto and Paris, both in terms of *integration* as well as inclusion from the *private sector*.

7 References

Abbott, K.W., Green, J.F, Keohane, R.O. (2016) "Organizational Ecology and Institutional Change in Global Governance" *International Organization*, vol 70(2), p. 247-277.

Agrawal, A. & Lemos, M.C. (2007) "A Greener Revolution in the Making?: Environmental Governance in the 21st Century", *Environment: Science and Policy for Sustainable Development*, 49:5, p. 36-45.

Bodansky, D, (2001) "The History of the Global Climate Change Regime", Luterbacher, U., Sprinz, D.F (Ed.) *International Relations and Global Climate Change*. MIT press, p. 23-40

Bäckstrand, K., Kuyper, J.W., Linnér, B., Lövbrand, E., (2017) "Non-state actors in global climate governance: from Copenhagen to Paris and beyond", *Environmental Politics*, vol. 26(4), p. 561-579

Bäckstrand, K., Lövbrand, E. (2015) "Climate governance after Copenhagen: research trends and policy practice", *Research handbook on climate governance*, Cheltenham: Edward Elgar Publishing, 2015, s. xvii-xxx

Böhringer, C. (2003) "The Kyoto Protocol: A Review and Perspectives", *ZEW Discussion Papers*, No. 03-61, Zentrum für Europäische Wirtschaftsforschung (ZEW), Mannheim.

Canevari-Luzardo, L., (2019) "Climate change adaptation in the private sector: application of a relational view of the firm", *Climate and Development*

Chan, S., Amling, W. (2019) "Does orchestration in the Global Climate Action Agenda efectively prioritize and mobilize transnational climate adaptation action?" *International Environment Agreements*, vol. 19, p. 429-446.

Chan, S., Brandi, C., Bauer, S., (2016) "Aligning Transnational Climate Action with International Climate Governance: The Road from Paris", *Review of European community & International Environmental Law*, vol. 25(2), p. 238-247

Ciplet, D. (2015). "Rethinking cooperation: Inequality and consent in international climate change politics". *Global Governance*, vol. 21(2), p. 247-274

Eisenhardt, K.M. & Graebner, M.E., (2007) "Theory Building from Cases: Opportunities and Challenges" *The Academy of Management Journal*, Vol. 50 (1), p. 25-32

Esaiasson P., Gilljam M., Oscarsson H. & Wängnerud L. (2012). Metodpraktikan: Konsten att studera samhälle, individ och marknad. 4. ed. Stockholm: Norstedts Juridik AB

Espagne, E, (2016), "Climate Finance at COP21 and After: Lessons Learnt". *Research and Expertise on the World Economy*

Falkner, R. (2016) "The Paris Agreement and the new logic of international climate politics", *International Affairs*, vol. 92(5) p. 1107-1125

Fisher, D.R., (2010) "COP-15 in Copenhagen: How the Merging of Movements Left Civil Society Out in the Cold", *Global Environmental Politics*, vol. 10(2), p. 11-17.

Folke, C., Carpenter, S., Walker, B., Scheffer, M., Elmqvist, T., Gunderson, L., and Holling, C. S. (2004) "Regime Shifts, Resilience, and Biodiversity in Ecosystem Management" *Annual Review of Ecology, Evolution, and Systematics*. Vol. 35, p. 557-581

Fuhr, L., Schalatek, L., Omari, K., (2011) "COP 17 in Durban: A Largely Empty Package", *The green political foundation*

Grubb, M., (2015), "From Lima to Paris, Part 1: The Lima Hangover", *Climate Policy*, vol. 15(3), p. 299-301

Hale, T., (2016). "All Hands on Deck": The Paris Agreement and Nonstate Climate Action", *Global Environmental Politics*, vol. 16(3), p. 12-22

Hovi, J., Sprinz, D.F., Sælen, H., Underdal, A., (2016). "Climate change mitigation: a role for climate clubs?" *Palgrave Communications*, 16020

Hsueh, L., (2017) "Transnational Climate Governance and the Global 500: Examining Private Actor Participation by Firm-Level Factors and Dynamics", *International Interactions*, vol. 43(1), 48-75

Inman, K. (2010). "The symbolic copenhagen accord falls short of goals." *University of Baltimore Journal of Environmental Law*, vol. 17(2), p. 219–228

Keohane, R., & Victor, D. (2011). "The Regime Complex for Climate Change". *Perspectives on Politics*, vol. 9(1), p. 7-23.

Kuyper, J., Schroeder, H., Linnér, B., (2018). "The Evolution of the UNFCCC" *Annual Review of Environment and Resources*, vol 43, p. 343-368

McInerney, C., Johannsdottir, L. (2016). "Lima Paris Action Agenda: Focus on Private Finance - note from COP21" *Journal of Cleaner Production*, vol. 126, p. 707-710 McKibbin, W.J., Wilcoxen, P.J., (2002) "The Role of Economics in Climate Change Policy" *Journal of Economic Perspectives*, vol. 16(2), p. 107-129

McCright, A.M. & Dunlap, R.E., (2003). "Defeating Kyoto: The Conservative Movement's Impact on U.S. Climate Change Policy" *Social Problems*, Vol. 50, No. 3, pages 348–373

Meyer, J.W., Frank, D.J., Hironaka, A., Schofer, E., Tuma, N.B. (1997) "The Structuring of a World Environmental Regime, 1870-1990" *International Organization*, vol. 51(4), p.623-651.

Obold, J., Burns, M., & Baker, C. (2012). "Impressions from durban: Cop-17 and current climate change policies." *Colorado Journal of International Environmental Law and Policy*, vol. 23(2), p. 389-404.

Remi, M., "Unconstructive Ambiguity in the Durban Climate Deal of COP 17 / CMP 7." *Sustainable Development Law & Policy*, vol. 12(2), p. 6-11, p. 52-56.

Prins, G. & Rayner, S. (2007). "Time to ditch Kyoto" *Nature*, Vol 449, p. 973-975.

Rimmer, M. (2014), "We are here to make history': The United Nations climate summit 2014." *Medium*

Shockley, K. & Boran, I., (2015). "COP 20 Lima: The ethical dimension of climate negotiations on the way to Paris–Issues, challenges, prospects", *Ethics, Policy & Environment*, vol. 18(2), p. 117-122

Streck, C. (2020) "Filling in for Governments? The Role of the Private Actors in the International Climate Regime". *Journal for European Environmental & Planning Law*, vol. 17, p. 5-28

Tansey, R. (2007)." Process Tracing and Elite Interviewing: A Case for Non-probability Sampling", *Political Science & Politics*. Vol. 40:1, p. 765-772

Teorell, J. & Svensson, T. (2007). Att fråga och att svara: Samhällsvetenskaplig metod. Stockholm: Liber

UNFCCC (1998) "Kyoto Protocol to the United Nations Framework Convention on Climate Change"