



Working Paper Series

Working Paper 2 (July 2013)

It's domestic politics, stupid! The US climate field: policies, actors and consequences

Franziskus von Lucke, University of Tübingen

It's domestic politics, stupid! The US climate field: policies, actors and consequences

*Franziskus von Lucke**, Research Associate and PhD Candidate, ClimaSec Project, University of Tübingen

Contact: Franziskus.von-Lucke@uni-tuebingen.de

ClimaSec Working Paper #2 (July 2013)

** Many thanks to the student research assistants: Hanna Spanhel and Benno Keppner, University of Tübingen*

Abbreviations

BAU	Business as Usual Scenario
C2ES	The Center for Climate and Energy Solutions
CDM	Clean Development Mechanism
CNA	Center for Naval Analysis of the CNA
CNAS	Center for a New American Security
COP	Conference of the Parties
CPI	Climate Performance Index
CRI	Global Climate Risk Index (Germanwatch)
CSIS	Center for Strategic & International Studies
EPA	Environmental Protection Agency
GHG	Greenhouse Gas
HDI	Human Development Index
IPCC	Intergovernmental Panel on Climate Change
NGO	Non-Governmental Organizations
NSS	US National Security Strategy
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
UNSC	United Nations Security Council

1. Introduction

Since the discovery that there exists a growing anthropogenic influence on the global climate and that this in turn could lead to serious consequences for human living conditions, “global climate change” has been framed in very diverse ways in the international discussions. In the beginning, the topic was mostly treated as an environmental issue (such as acid rain, forest dieback etc.) to be left to specific advocacy groups, scientists or ministries of the environment. At that time (approximately 1985 until 1992), environmental NGOs began to link the topic with security concerns to raise awareness and set it on the agenda of political leaders (e.g. *World Watch Institute*, the *Climate Institute*, the *New Economics Foundation* or the *Friends of the Earth*) (Oels 2012: 186). Parallel to this first phase of climate security debates, the interest in political circles for the topic began to increase and the United Nations Framework Convention on Climate Change (UNFCCC) was established at the Rio Summit of the United Nations Conference on Environment and Development (UNCED) in 1992.

In the course of the 1990s the discussion shifted in a more economic direction after scientific evidence showed the serious anthropogenic effects on the global climate and predicted that future adaptation measures would be associated with immense costs. The debates were dominated by questions of the cost of climate adaptation and mitigation compared to non-action (see for example the Stern Report 2006, which can be regarded as the culminating point of this line of thinking (Stern 2006)).

Since the turn of the millennium, the discussion of the possible security effects of climate change gained renewed momentum (Brzoska and Oels 2011). In line with more accurate forecasts about the widespread physical effects of climate change (e.g. more and more extreme weather events, altered precipitation, shifting climate zones, sea level rise, desertification etc.) and their effect on human habitats and lifestyles, the discussion about climate change as a security threat became again more relevant. The primary actors raising awareness of the link between climate change and security were once again not solely political bodies but various Non-Governmental Organizations (NGOs) and Think Tanks for instance Christian Aid, CNA Corporation, Center for Strategic and International Studies (CSIS) and Center for a New American Security (CNAS)¹. Based on earlier debates on environmental security (Mathews 1989) and the possibility of widespread environmentally induced migration and conflict (Homer-Dixon 1994b; Homer-Dixon 1999; Myers 1995, 2002) they pointed out how the effects of global climate change could contribute to these problems. It was only after these NGO efforts that the climate security debate gained momentum in the political sphere. In 2007, the

¹ Christian Aid (2007); CNA Corporation (2007); CSIS (Center for Strategic & International Studies) and CNS (Center for a New American Security) (2007); Smith and Vivekananda (2007).

United Nations Security Council (UNSC) held its first session on the possible implications of climate change on international peace and security (UNSC (United Nations Security Council) 2007a), followed by a report of the secretary general (UNGA (United Nations General Assembly) 2009b), various resolutions (UNGA (United Nations General Assembly) 2008, 2009a) and a second session of the UNSC in 2011 (UNSC (United Nations Security Council) 2011a).

In academia, this development is seen with concern. Firstly, the direct link between climate change effects and conflict which is drawn in some of the reports and resolutions is called into question (Barnett and Adger 2007; Reuveny 2007). And secondly, there is a growing concern about the political effects of this “securitisation” of climate change². Departing from the Copenhagen School’s (Buzan *et al.* 1998) approach to securitisation and combining it with the concept of discourse, our *ClimaSec* project strives to uncover these effects and the actors involved in the securitisation process. It does so from a comparative perspective, looking at four countries which differ in regard to their socio-economic development and their standing in international and domestic climate politics. These countries are the USA (industrialized country, laggard in the climate negotiations), Germany (industrialized country, vanguard in the climate negotiations), Turkey (emerging economy, laggard in the climate negotiations), and Mexico (emerging economy, vanguard in the climate negotiations). The climate security-debate gained momentum especially through the involvement of NGOs and think tanks. Hence, the *ClimaSec* project looks particularly at reports and contributions of these actors. This paper concentrates on the US case. Through a survey of the most relevant secondary and primary sources it sheds light on the most important climate debates and dynamics in the country and identifies key actors that are involved in these processes. As the *ClimaSec* project tries to uncover how securitisation processes have influenced policy making – and which actors contributed most –, special attention is given to climate security debates, although without neglecting the overall picture.

The paper is structured as follows: After this introduction and a very brief section about the US and its general standing in world politics as well as its overall performance in climate matters (*section 3*), *section 4* will give an overview of the domestic debates. The subsequent *section 5* examines the US behaviour in the international climate negotiations, whereas *section 6* elaborates on the most important actors involved in US climate debates with a focus on the climate-security-debate.

² Brzoska (2009); Hartmann (2010); Oels (2012); McDonald (2005), (2008); Rothe (2011), (2012); Methmann and Oels (2013 (in press)); Methmann and Rothe (2012).

2. Country Background

To account for US' domestic and international climate policies, it is important to first take a brief look at the internal political organization of the country, its general position in the region and its relation to the international community. Although the global hegemony of the United States is less dominating than it used to be – due to the rise of new powers such as China and India and an increasingly multipolar world order (at least concerning non-military issues) – militarily and economically speaking the US is still the strongest power in the world. It is the unchallenged regional power in North America and projects considerable – though decreasing – influence on Central and even South America. The US has shown a constant population growth (about one per cent per annum) in the last decades, rising from 253 million in 1991 to 309 million inhabitants in 2010, with a per capita Gross National Income (GNI) increasing from 23,460 \$ to 47 2350 \$ within the same period. The overall Gross Domestic Product (GDP) constantly grew between 3 and 4 per cent since 1991, with the exception of the crisis years 2008 and 2009 (World Bank 2012). Turning to the Human Development Index (HDI), the USA ranks 4th (0.902) and can hence be considered one of the most developed countries worldwide.

Following India, the United States is the most populous democracy worldwide. It is a federal republic, led by a presidential system, with the president – together with its administration – being the executive branch, checked by a strong legislative organ – the bicameral Congress. The first chamber is the upper house, the *Senate*, with 100 Senators (two for each state) elected in their respective states for six years – every two years, one third of the senators face elections. The second chamber, the *House of Representatives*, consists of 435 members, which are elected for four year terms. Elections are held every two years; the number of representatives from each state depends on their respective state population. The president (who is elected for four years, with a maximum of eight consecutive years) does not automatically have the majority in Congress and – due to the pluralism of the American political system – faces many checks and balances, see also (Fletcher 2009: 805). Because Congress has to approve public international treaties before ratification, it has been a major veto-player regarding federal climate legislation and the commitment to legally binding international emission reduction regimes in the past. Two major parties dominate the political system, namely the rather liberal and center-left *Democrats* and the rather conservative and center-right *Republicans*. In the past, Republicans tended to vote against decisive climate laws and Democrats for such legislation. However, party membership and discipline is less distinct than in most European states, which, too, can give the president a hard time when passing laws through the Congress. Besides the federal level, the United States consists of 50 states, which have, due to the Commerce Clause of the US constitution, fairly broad responsibilities. Regarding climate legislation, the developments on the

state level have been of particular importance. For apart from the federal level, each state can issue its own climate legislation, which has led to a quite fragmented picture of the overall climate laws in the country – with the states being the more progressive actors in this respect (see section 4).

Since the beginning of the UNFCCC process, the United States had five administrations: The republican Presidents Ronald Reagan (1981–1989) and George H. W. Bush (1989–1993) who both can be considered fairly open to environmental and climate topics; the democratic President Bill Clinton (1993–2001) who, together with his Vice-President Albert Gore, actively promoted initiatives to consider the environment and climate change as important security issues; another republican administration under George W. Bush (2001–2009) which, particularly during its first term, can be considered a strong laggard with regards to climate policies; and finally the Democrat Barack Obama (since 2009) who, at least at the rhetoric level, put climate issues again on the forefront of the US agenda³.

3. Overview of Climate Policies in the US

To begin with, the USA has long been the biggest emitter of GHGs worldwide (with a share of about 20 per cent of total emissions (Donner and Faltin 2007: 4)) and only recently lost this position to China. Since the 1990s, per capita emissions (which are amongst the highest worldwide – much higher than those of China) remained fairly stable, with 19.5 metric tons in 1990 and 18.6 in 2008. Total emissions were on the rise throughout the 1990s (1990: 4,879,376 kilotons (kt); 2000: 5,713,450 kt) but showed only a slight increase until 2007 (5,828,697 kt), which was followed by a decrease in 2008 (5,656,839 kt) and 2009 (5,299,563 kt)⁴ (World Bank 2013). Additionally, the energy and resource consumption of the United States still counts as one of the highest worldwide (Falkner 2005: 591).

Regarding effective climate policies, the US performed rather poorly in the last couple of years. This is especially true for the federal government where most initiatives never made it through Congress, whereas at the state level, several initiatives and improvements in the climate legislation were enacted (see section 4). Although, according to the *Climate Performance Index* (CPI), the USA has not performed well regarding recent climate actions, it has shown a striking improvement between 2011 and 2013 (see table 1). The financial crisis in 2008 and the economic downturn in the aftermath as

³ However, no national climate legislation has been enacted so far. Nevertheless various attempts for climate legislation took place within this period, though so far all were eventually rejected in congress (see section 4).

⁴ This may be attributed to the economic downturn at that time and to a shift in the energy production from coal to gas Burck *et al.* (2012: 4).

well as the shift from coal to gas⁵ in many power plants are important explanations for this positive development (Burck *et al.* 2012: 4).

Table 1: US CPI rankings and scores 2008-2013		
Year	Rank	Score
2008	55	33.4
2009	58 ⁶	39.8
2010	53	46.3
2011	54	46.5
2012	52	48.5
2013	43	53.51

Table 1 – Source of data: Germanwatch Climate Performance Index (2013)

Concerning its vulnerability to the effects of climate change, the US ranks 30th (CRI Score 45.33) in the *Global Climate Risk Index* (average ranking between 1992 and 2011). Hence, it showed a very high vulnerability to the effects of climate change in the past. It is important to stress here that the CRI only shows the vulnerability of the past, based on economic losses and human casualties. The considerably high vulnerability of the US is mainly due to economic/financial losses – these might be especially high compared to other countries because of widespread insurance coverage (Harmeling and Eckstein 2012: 4). Based on another measurement of vulnerability, the *Gain Index*, which also takes future climatic changes and the coping capacity into account, the US is considerably less vulnerable⁷ and ranks 20th out of 183 countries⁸ (Global Adaptation Institute 2012). This discrepancy can be partly explained by the fact that the US has at the same time a very high capacity to cope with the adverse effects of climate change because of its high overall development. This, for example, is mirrored in the HDI-Score (4th) or the “readiness-index” of the Gain-Index, where the US ranks 12th out of 178th countries.⁹

⁵ However, emissions from shale gas, which is released in the extraction process, are not sufficiently reflected in the underlying data of the index Harmeling and Eckstein (2012: 4).

⁶ New Ranking since 2009, the first three ranks are left free to symbolically show that no country is doing enough to prevent climate change.

⁷ “Vulnerability measures a country's exposure, sensitivity and ability to cope with climate related hazards, as well as accounting for the overall status of food, water, health and infrastructure within the nation” Global Adaptation Institute (2012).

⁸ Rank one indicates the lowest vulnerability, i.e. also a fairly high coping capacity.

⁹ “Readiness seeks to measure the ability of a country’s private and public sectors to absorb additional investment resources and apply them effectively towards increasing resiliency to climate change” Global Adaptation Institute (2012).

Because of its overwhelmingly large share of global emissions, it is regarded as crucial to integrate the US in international binding regimes which cut GHG emissions. For when the biggest per capita emitter would take on a leading role, other countries might follow, or – on the other side – could not point to the US as an excuse for not committing to binding cuts, as China and India have done in the past (Ochs 2011: 47; Donner and Faltin 2007: 4): “The United States, thus, has the potential to dramatically influence the effectiveness of international regimes in their promotion of environmental protection” (Falkner 2005: 591). However, it seems rather difficult for the US to subscribe to a stronger commitment concerning domestic as well as international climate policies. Some underlying reasons are the vast natural resources on US territory and an overall high dependency on fossil fuels (in energy production as well as in the transport sector) as well as many veto players in the climate field (a strong congress, which is often not controlled by the government; strong influence of economic actors on policies (Falkner 2005: 593; Mildner and Richert 2010: 6)) and also an influential scene of “climate skeptics” that doubt the anthropogenic influence on the global climate (Ochs 2011: 50). Moreover, the leading principle of the UNFCCC, the common, but differentiated responsibility, which first and foremost obligates the industrialized countries to cut their emissions, has never been fully accepted by the United States. This position can be partly attributed to concerns of losing economically ground in comparison to the newly emerging economies such as China, India or Brazil, if one would have to cut emissions unitarily. Ultimately, because of the strong position of Congress regarding the ratification of international legally binding commitments and influential non-governmental lobby groups, the developments on the domestic level have an enormous influence on US behavior in international negotiations. Therefore, the US pledges in the UNFCCC process very often mirror the domestic legislation (Falkner 2005: 597). Robert Falkner concludes that a strong environmental commitment of the US is much more likely when strong coalitions of domestic actors in favor of such issues are being established (Falkner 2005: 595, 597). This observation makes it even more plausible to expect an effect of a securitisation of climate change, because divided interests can then unite behind the common concern for the US security.

4. Domestic Level

From the late 1960s on, the USA had always been a forerunner in environmental issues, with a vibrant environmental community and quite progressive laws and initiatives¹⁰ (Falkner 2005: 585, 590). This was still the case at the beginning of international climate negotiations in the late 1980s

¹⁰ For example, the 1970 founded Environmental Protection Agency (EPA) can be regarded as a model for similar institutions in other countries. Additionally, some US environmental organizations such as the Sierra Club, The National Audubon Society or the Environmental Defense Fund were forerunners in the field. Concerning the international level, the US strongly rallied for international agreements and national regulations in regard to whaling practices and the ozone layer regime (Montreal Protocol) Falkner (2005: 590).

and in the early 1990s (Donner and Faltin 2007: 5). Under the presidency of Ronald Reagan, environmental degradation and resource scarcity ranked relatively high, even played a role as security issues and were listed in the US National Security Strategy (NSS) – a practice that continued under the administrations of George H. W. Bush and Bill Clinton (Harris 2002: 150). The connection that was drawn between the environment and security, which later on also included climate change, was facilitated by the end of the cold war, leaving the US security establishment without enemy and therefore focusing onto new threats, such as the environment. Additionally, the end of the cold war overlapped with a renewed international interest in environmental issues as can be seen in the staging of important conferences such as the Rio Earth Summit in 1992 (Floyd 2010: 65, 69, 119). Climate change was in particular firstly mentioned in in the US NSS in 1991, although only as one topic besides many and with a rather low priority. Under Clinton, environmental topics in general as well as the environment as a security issue became more important. As Harris (2002) points out, a reason for this high standing of environmental issues under the Clinton administration could have been that organizations and individuals advocating a connection between the environment and security concerns were closely connected to the government and that important personnel within the government also pushed the issue, for example vice president Al Gore (Harris 2002: 154). Influenced by academic debates about environmental scarcity leading to violent conflict and threatening the national security (Homer-Dixon 1994a; Kaplan 1994), the domestic environmental security debate gained new momentum in 1994 (Floyd 2010: 73). From that year onwards, climate change and other environmental security issues were treated as “very real” threats for regional and global stability in the NSS (Harris 2002: 151; Below 2007: 709; Richert 2009: 10). Practical outcomes of this domestic environmental security debate – which some scholars even classify as successful securitisation move (Floyd 2010: 96) – were the establishment of various programs and initiatives such as the *Strategic Environmental Research and Development Program (SERDP)*, which allowed the use of intelligence capabilities to monitor the environment (Floyd 2010: 80); the *Office of the Deputy Under Secretary of Defense Environmental Security (ODUSD-ES)*, which dealt with various environmental security topics and received funding of five billion dollars per annum (Floyd 2010: 95); and a further integration of environmental concerns into military planning. Furthermore, within the period of these environmental security discussions, the United States signed the UNFCCC (1993) and the Kyoto protocol (1997).

However, the interest for the environment and its role as a security issue faded throughout the late 1990s and especially after the election of George W. Bush¹¹ in 2001 (Harris 2002: 153). This shifting attitude can, to a considerable extent, be attributed to a changing domestic environment where

¹¹ However, the Kyoto protocol had already been rejected in the Senate in 2001 before Bush became president.

Congress (especially Republicans) and also an influential non-governmental lobby rallied increasingly against progressive environmental and climate policies, especially concerning international legally binding agreements (Falkner 2005: 590). Under the presidency of George W. Bush, this trend consolidated and the influential lobby of climate skeptics together with strong economic actors further succeeded in almost completely discouraging any strong legislative action on the federal level (Fletcher 2009: 806). Many members of the Bush administration, including the president himself, expressed their doubts at various occasions that there was at all a human influence on the climate system and hence saw no pressing need to cut emissions (Barnett 2004). Under George W. Bush, climate change was not directly mentioned in the NSS, although it contained various passages on other environmental disasters such as floods, storms and Tsunamis (Richert 2009: 11).

At that time, the US focus concerning climate action shifted from committing to binding reduction targets to fostering voluntary instruments and technological fixes (Donner and Faltin 2007: 5) and climate change seemed to be only one rather unimportant issue besides bigger threats to the US national security such as terrorism or the war against Iraq (Floyd 2010: 122). Accordingly, the steps taken by the Clinton administration to connect the environment and climate change with security concerns were actively rolled back during Bush's first term in office. That meant cuts in funding, renaming of institutions and the replacement of important personnel – in short a process of de-securitisation. In contradiction to the claims of the original Copenhagen school though, this de-securitisation did not lead to a politicization of the issue but facilitated the de-politicization of climate topics (Floyd 2010: 127, 142, 166). However, the environmental and climate security debate did not vanish entirely and in political and military circles climate change continued to be mentioned in connection to security concerns. In 2003, Schwartz and Randall published an alarming report (commissioned by the Department of Defense) called *“An Abrupt Climate Change Scenario and Its Implications for United States National Security”*, which dealt with the possible implications of climate change on US national security (Schwartz and Randall 2003). This report can be considered as one important starting point of a second (environmental) climate security debate in the US (involving primarily think tanks), which partly connected to the securitisation of the environment during the Clinton era. In 2007, this culminated in the publication of two influential studies: one by the *Center for Naval Analysis of the CNA* (CNA Corporation 2007) and one joined report by the *Center for Strategic & International Studies* (CSIS) and the *Center for a New American Security* CNAS (CSIS (Center for Strategic & International Studies) and CNS (Center for a New American Security) 2007). Moreover, it was also in 2007 that former Vice-president Albert “Al” Gore together with the IPCC received the Nobel-Prize and delivered a highly noticed acceptance speech in which he used clear cut securitisation vocabulary.

This climate security debate was actively used by the opposition to put pressure on the Bush administration to bring climate change onto the political agenda (Brzoska 2012: 172) and succeeded in raising considerable awareness for the topic in the general public and in political as well as military circles (Mildner and Richert 2010: 12). It also helped to bridge the divide concerning climate policy approaches between republican/conservatives and democratic/liberal actors (Fletcher 2009: 808; Below 2007: 710f). Yet, still no successful climate legislation has been reached at the federal level¹². Nevertheless, there were various attempts (though all failed eventually) of Democrats and moderate Republicans to bring the issue into Congress, such as the *McCain-Liebermann GHG cap-and-trade bill 2003*, the *McCain-Liebermann Climate Stewardship Act 2005* and the *Founding of the Subcommittee for Global Warming in the House of Representatives*. Especially, after the Republicans had lost their majority in Congress in 2006, the number of climate initiatives began to increase (Donner and Faltin 2007: 9). In 2007, the *Global Warming Pollution Reduction Act* and the following *Liebermann-Warner Climate Security Act* (in which a climate-security argumentation is put forward to justify emission trading schemes (Richert 2009: 7)) marked important attempts to set climate change on the political agenda. In total, the 110th congress (2007–2008) – in which the Democrats held both chambers – passed over 235 bills and resolutions concerning climate change. Throughout the Bush administration initiatives in Congress had steadily grown with only 75 between 2001-2002 rising to 106 between 2005–2006 and the 235 in the 110th congress (Center for Climate and Energy Solutions (C2ES) 2008). These often bipartisan approaches show that the framing of climate change as a security issue might have helped to overcome the sometimes quite ideological divides between Democrats as climate change “believers” and Republicans as “sceptics” (Fletcher 2009: 807). Additionally, the focus on the security aspects of climate change helped to include defense, military and intelligence actors in the debate (Fletcher 2009: 808). Accordingly, in 2008, the *Intelligence Authorization Act for Fiscal Year 2008* tried to prompt the intelligence agencies to consider the national security and geopolitical implications of climate change. Furthermore, the *Global Climate Change Security Oversight Act* urged the Department of Defense (DOD) to foster research into and readiness for possible military consequences of climate change. Eventually, the *National Defense Authorization Act 2008* succeeded with a similar attempt and obligated the DOD to integrate climate change into the Quadrennial Defense Review (Center for Climate and Energy Solutions (C2ES) 2008); see also (Hartmann 2009) on the issue¹³. Other explanations for the growth of climate initiatives

¹² Although no national climate legislation has been reached, one effect of the climate-security-debate was an increased interconnectedness between military and civil measures in regard to development cooperation and disaster relief and also the usage of climate vocabulary and procedures in the defense sector. This is a process which some scholars also called the “climatization” of the security field Hartmann (2010: 240f); Brzoska and Oels (2011).

¹³ The *Quadrennial Defense Review 2010* was the first QDR that mentioned climate change and depicts the topic as problem for global and national security United States Government (2010: 84); Nagel (2011: 207).

during the second Bush term were the increased domestic pressures due to fears of losing ground towards the Kyoto countries and initiatives at the state level, which will be examined in the next paragraph (Donner and Faltin 2007: 15; Mildner and Richert 2010: 31).

Besides the problems on the federal level to reach a nationwide climate legislation, various states started initiatives tackling climate change and other environmental issues within the same time-frame (Donner and Faltin 2007: 11ff; Mildner and Richert 2010: 30ff; Center for Climate and Energy Solutions (C2ES) 2012c). In 2005, for example, California¹⁴ passed a legally binding emission reduction goal as well as tightened regulations concerning GHG emissions of cars, although these regulations could enter into force only after the *Environmental Protection Agency* (EPA)¹⁵ had declared greenhouse gases a threat to health in 2009 (see section 6). Later on, similar laws were passed in over 14 other states and in addition to California, Hawaii, Illinois and New Jersey committed to binding emission caps (Mildner and Richert 2010: 30). Likewise, today, the majority of states have passed so called *Renewable Portfolio Standards* (RPS) or *Alternative Energy Portfolio Standards* (AEPS), which foster the implementation of renewable energy sources (Center for Climate and Energy Solutions (C2ES) 2012b). In addition, in 2005, the interstate *Clean Energy–Environment State Partnership* was established, which included various action plans on clean energy and the protection of the environment and has been expanded in the following years (Environmental Protection Agency (EPA) 2013b)¹⁶. Until today, various measures and initiatives have been planned or implemented at the state level, ranging from GHG-reporting schemes, mitigation and adaptation action plans, facilitation of renewable energy sources, and several regulations concerning the construction and transport sector (Center for Climate and Energy Solutions (C2ES) 2012b). Under the presidency of Barack Obama several further initiatives were established e.g. the *Midwestern Energy Infrastructure Accord*, and even some cooperation with federal states in Canada and with Brazil and Indonesia concerning anti deforestation measures (Mildner and Richert 2010: 32). Hence, these initiatives on the state level – which at that time already accounted for about one third of the overall US emissions (Mildner and Richert 2010: 31) – can be regarded as a considerable contribution to the general US climate policy.

¹⁴ California is the 7th biggest economy worldwide and also has a considerable influence on the US as a whole because of its big market share. Accordingly, other states often try to adjust to the regulations of the State of California to facilitate the export of products to this big market Müller (2003: 16).

¹⁵ After a ruling of the Supreme Court in this respect Greenhouse (2007).

¹⁶ In 2007, the following states participated: California, Colorado, Connecticut, Georgia, Hawaii, Massachusetts, Minnesota, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Texas, and Utah (EPA 2007). Other regional initiatives are the *West Coast Global Warming Initiative*; the *Southwest Climate Change Initiative*; the *Midwestern Regional GHG Reduction Accord*, and also several co-operations with Canadian states Mildner and Richert (2010: 32).

After Barack Obama became president in 2009, hopes for more climate friendly US policies were high (Dröge 2012: 1). For in the election campaign, climate change had featured prominently and Obama had already announced quite radical emissions reduction targets of 80 per cent until 2050 as well as a stronger reliance on renewable energy sources of 25 per cent until 2025 and the establishment of an emission trading scheme (Mildner and Richert 2010: 5). Moreover, at that time, the prerequisites for a more comprehensive nationwide US climate legislation were good because throughout the second half of the 2000s the opinion in the population and in the economy regarding the existence of anthropogenic climate change and its recognition as a major threat had shifted considerably¹⁷. In 2004, only 28 per cent of the population believed in the dangerous effects of climate change whereas in 2007 this figure rose to 48 per cent¹⁸. Likewise, in 2007, 62 per cent were in favor of decisive measures to counter climate change – though the approval rate was much lower when the questionnaire indicated that these measures would slow down the economy (Mildner and Richert 2010: 12). Apart from the general public opinion, the trend had changed in the economy as well. In 2007, several companies together with environmental organizations founded the *US Climate Action Partnership*, which was in favor of considerable emission cuts until 2050 (United States Climate Action Partnership (USCAP) 2013). Equally, topics such as green growth and jobs, renewable energy sources and a national emission trading scheme were not treated as an outright attack on the economy any more (Mildner and Richert 2010: 13). This opinion shift¹⁹ can be partly attributed to more frequent disasters in the US and more media coverage on the topic, but also to the ongoing debate on climate change as a security issue (Mildner and Richert 2010: 12).

In addition to the rising public approval, the Democrats held a majority in both chambers of Congress at that time and Obama appointed several well-known climate experts for important jobs in his administration (Todd Stern as special envoy for the international negotiations; Carol Browner as coordinator of the newly established *Climate Change and Energy Office* in the White House²⁰; Lisa Jackson and Steven Chu as heads of the EPA and the Department of Energy) (US Department of State

¹⁷ However, there was still a considerable political divide between Democrats/Liberals and Republicans / Conservatives. Liberals and Democrats were more likely to belief reports consistent with the scientific consensus and express concerns for climate change , while the opinions of Conservatives and Republicans tended to go in the opposite direction McCright and Dunlap (2011: 155).

¹⁸ Nevertheless, the overall American approval ratings for decisive climate change counter measures were (during the last decade) still below those in most other countries Nagel (2011: 203). A survey of the Pew Research Center conducted in 2013 confirmed these polls. While climate change was conceived in most world regions and countries as the most important threat (with a median percentage of over 50 per cent), US citizens (together with the Middle East region) showed less concern, with a median percentage of only 40 per cent saying that climate change was a major threat Pew Research Center (2013: 1).

¹⁹ However, climate change still ranked much lower than for example terrorism or the economy, which was exemplified during the economic crisis in 2008/2009 Mildner and Richert (2010: 13).

²⁰ Which was shut down again by congress in 2011 by cutting its budget.

2009a; Mildner and Richert 2010: 18). Therefore, at the beginning of his first term, climate change issues featured prominently on Obama's agenda, especially in connection with energy security and independence as well as the promotion of green technology and jobs.

In 2009, the House of Representatives adopted the *American Clean Energy and Security Act (ACES)*, which would have been the first comprehensive US climate law. It foresaw a 17 per cent emission reduction until 2020 and 83 per cent in 2050 compared to 2005, a national emission trading scheme and the goal to lift the share of renewable energy sources to 20 per cent until 2025 (Center for Climate and Energy Solutions (C2ES) 2009b). However, the act did not make it through the Senate (Mildner *et al.* 2012: 2). Throughout Obama's first presidential term, various similar laws and initiatives²¹ were brought into Congress but they were not approved in both chambers and did therefore not enter into force (Center for Climate and Energy Solutions (C2ES) 2013a).

After the failed UNFCCC negotiations in Copenhagen (COP 15, 2009) and after losing the democratic majority in Senate in the midterm elections in 2010, the Obama administration stopped pushing for new federal climate legislation. Instead, the focus lay once again more on different ways of influencing the domestic climate field through regulations of the EPA²² and the *Departments of Transport and Energy*. This approach became possible because in 2009, the EPA had declared CO₂ and some other greenhouse gases a threat to the health of the population (Environmental Protection Agency (EPA) 2009), which now enabled the administration to regulate them under the so called *Clean Air Act* (originally established in 1970). Going through the EPA and the ministries, the administration was able to shortcut Congress and avoid further setbacks in this difficult arena²³. Already in 2007 the *Energy Independence and Security Act* had been adopted and in 2009, the transport ministry announced much stricter regulations regarding auto and truck fuel efficiency for 2011 (Environmental Protection Agency (EPA) 2013a). Several further regulations followed, e.g. emission standards for the transport sector and reporting duties for major CO₂ emitting companies (over 25.000 tons per annum) (Environmental Protection Agency (EPA) 2012). However, governing through these regulations did not go without major criticism from the opposition and was also not

²¹ The *Climate Stewardship and Innovation Act* (GHG cuts from 2012 until 2050 by one third compared to the year 2000); the *Climate Security Act* (GHG cuts until 2050 by 63 per cent compared to 2005); the *Global Warming Pollution Reduction Act* (all three in 2007); the *American Clean Energy Leadership Act ACELA*, the *Clean Energy Jobs and American Power Act* in 2009

²² At the beginning of his presidency, Obama had already raised the EPA budget from 7.6 billion to 10.5 billion Environmental Protection Agency (EPA) (2010).

²³ Because of the close bonds to their electoral districts at the state level, Obama never had full approval of all Democratic senators regarding climate legislation. Especially senators from the Southern or Midwestern states with a strong focus on the coal, oil or gas and manufacturing sector (rustbelt) constantly voted against climate laws Mildner and Richert (2010: 26).

applicable for many important climate measures, as for example a national emission trading market or a binding reduction target (Mildner and Richert 2010: 21). Besides governing through these EPA regulations, the Obama administration continued to treat climate change as security issue and integrated the topic into its NSS 2010. Furthermore, strong emphasis was put on the connections to energy policies and energy independence strategies (Brzoska 2012: 173).

Between 2011 and 2013 US emissions went down and the country gained some ground in the global ranking of the *Climate Performance Index* (Burck *et al.* 2012). Nevertheless, this advancement cannot actually be attributed to political measures at the federal level. Rather, initiatives on the state level, favorable weather and economic conditions as well as the shift from coal to gas mostly account for this development (Mildner *et al.* 2012: 2).

As climate issues were not mentioned directly in the 2012 presidential election campaign – instead, energy independence featured relatively high on the agenda – it is rather doubtful whether Obama will achieve more in this field in his second term and whether the United States will in general develop in a more sustainable way²⁴. Quite to the contrary, estimates of the world energy agency in 2012 show a renewed oil and gas boom in the country. The US is already the biggest producer of natural gas worldwide and will draw level regarding oil in 2020 (International Energy Agency (IEA) 2012: 2). Hence, the often used argument of the Obama administration that climate measures and the fostering of renewable energy sources would increase the US-energy security may not work that well in the future. On top of that, the Republicans hold the majority in the House of Representatives and the Democrats do not hold the crucial 2/3 majority in the Senate, which they would need to enforce climate laws against a strong opposition²⁵ (Mildner *et al.* 2012: 3). Furthermore, according to recent polls of the *Pew Research Center* about the national priorities of the population in 2012, climate change came out last of all topics (Pew Research Center 2012: 1).

5. International Level

After this brief overview of US domestic climate debates and policies, this section sheds some light on the behavior of the USA in international climate negotiations. The US had been a quite progressive actor concerning environmental issues throughout most of the second half of the 20th century. This was still true at the beginning of the UNFCCC process. The USA signed the convention in 1992 and the Kyoto protocol in 1997 (with an original reduction target of seven per cent relative to

²⁴ However, the fact that he cannot be reelected after this second presidency might give Obama some leeway for a renewed attempt in national climate legislation Bastasch (2012).

²⁵ Without the 2/3 majority, the opposition can permanently postpone any decision with endless “filibuster” speeches United States Senate (2013).

the 1990 levels (Climate Action Tracker 2012)). In the forefront of the establishment of the Kyoto protocol, the US had to a considerable extent been responsible for the integration of the so called “flexible mechanisms” (Clean Development Mechanism, Joint Implementation and Emission Trading Schemes), which were supposed to reduce emission in a more economy friendly manner (Bang *et al.* 2005: 8).

However, during the 1990s the enthusiasm about environmental issues had already begun to decrease (see section 4) and even though Bill Clinton together with his vice president Al Gore tried to enhance environmental protection and climate policies – in part by linking it to security concerns and establishing various programs dealing with environmental security issues on the domestic and international level²⁶ –, these initiatives met strong resistance in Congress (Falkner 2005: 592). Eventually, the roles of the earlier decades were successfully interchanged with the US now playing the laggard, whereas most European countries and the EU were striving for the vanguard role concerning environmental and especially climate issues (Falkner 2005: 590, 591). The debates in Congress and in the following Bush administration (especially in his first term) concentrated on possible harmful effects on the US economy and on widespread skepticism about the anthropogenic influence on the climate system (Fletcher 2009: 804–805). In 1997, after the signature of the Kyoto protocol, the Senate voted in the *Byrd-Hagel Resolution* (The National Center for Public and Policy Research 1997) against a legally binding emission reduction of the USA as long as the developing countries are not obliged to them as well. After this decision, the chances that the US would continue to support the Kyoto process almost vanished. As already foreseen by most observers, in the year 2001 the outstanding ratification of the Kyoto protocol was finally renounced by the Bush administration (Müller 2003: 10). Important reasons for the withdrawal are domestic pressures which are caused by perceptions of supposedly high costs for the US. It was argued that because the US population and the economy grew considerably in the 1990s this would lead to high reduction efforts when implementing the protocol. Also, it was criticized that binding reduction targets for the developing countries were absent in the protocol (Bang *et al.* 2005: 8). After the Kyoto protocol entered into force in 2005, the US²⁷ was the only major industrialized country that did not ratify the protocol (UNFCCC (United Nations Framework Convention on Climate Change) 2013).

²⁶ For instance the *Arctic Military Environmental Cooperation (AMEC)*; the inclusion of environmental concerns with a focus on failed states in Africa and the Middle East into the planning of the *US Central Command (CENTCOM)*; or the establishment of Environmental Diplomacy as distinct part of the US Foreign policy Floyd (2010: 100, 106, 109).

²⁷ In the year 2011 Canada also withdrew from its Kyoto commitments.

Furthermore, because of the 9/11 terrorist attacks in 2001, climate change issues ranked even lower on the US agenda in the early 2000s than before and the debate focused on voluntary emission cuts, on economic as well as technological fixes for the problem²⁸ and on alternatives to Kyoto (Yamin and Depledge 2004: 45ff). In 2002, the administration announced – as a substitute to the Kyoto process – to voluntarily cut the US GHG-intensity (GHG in relation to the GDP) by 18 per cent until 2012 i.e. an increase of its emissions, although a somewhat slower one. Likewise, further initiatives in Bush's first term mostly focused on a solution in line with US economic interests, which meant that the administration continued its rejection of internationally binding commitments and the Kyoto process.

In the second term of the Bush administration, this picture began to change slightly and at least at the rhetorical level the commitment to international climate initiatives increased. This development can be partly attributed to increased domestic and international pressures in favor of more climate related activity and to the emerging topic of energy security and independence, which the Bush administration connected to climate issues (The Library of Congress 2005; Floyd 2010: 158, 159). Energy security also was one important point in the statement of the US delegation at the UNSC meeting in 2007 about the security implications of climate change (UNSC (United Nations Security Council) 2007a: 10-11).

However, the international climate record of the administration remained low. Some of the most important initiatives were the 2005 announced *Asia-Pacific-Partnership on Clean Development and Climate* (APP) (Asia Pacific Partnership 2012) that was declared as a voluntary alternative to Kyoto, but never led to any substantial results; the *Carbon Sequestration Leadership Forum* (CSLF) and the *Advanced Energy Initiative* (in 2006) both of which had no considerable impact on the international negotiations (Floyd 2010: 161). Besides these initiatives, the US signed various bilateral agreements concerning voluntary emission reductions with over 14 countries until 2005 (Fletcher 2009: 805). In the same year, the US-administration under George W. Bush finally acknowledged an anthropogenic influence on the global climate (Clarke 2005), which was further institutionalized with the official acceptance of the 4th IPCC assessment report in 2007. In September 2007, the *Major Economies Meeting on Energy Security and Climate Change* was initiated by the Bush administration to bring together the biggest GHG emitters and to discuss long term climate targets. Nonetheless, binding emission targets and mechanisms as those in the Kyoto protocol were strongly opposed.

Despite the recent acceptance of a human influence and a somewhat increased engagement with climate issues, the country's position had not changed much until the *COP13 in Bali in 2007* and the

²⁸ A position that was put forward in line with the so called Umbrella Group Yamin and Depledge (2004)

United States carried on rallying for the stronger integration of emerging economies such as China, India and Brazil whilst at the same time insisting on only voluntary commitments for the industrialized countries. However, after strong pressure from most other participants the US finally accepted the consensus on the so called *Bali Roadmap*, which foresaw “measurable, reportable and verifiable nationally appropriate mitigation commitments (...)” (UNFCCC (United Nations Framework Convention on Climate Change) 2007: 3) for all developed countries. The roadmap also included the *Bali Action Plan*, a timetable for a second, more inclusive regime following the Kyoto protocol (which was supposed to be finally negotiated at the COP 15 in Copenhagen), the commitment to transfer technology and money to developing countries, the establishment of an Adaptation Fund (to help developing countries adapt to the effects of climate change) and lastly some non-binding commitments of emerging economies to do more about climate change in a new regime, depending on support from the industrialized countries (Becker 2007; BAFU Schweiz 2007). Despite the rhetoric of the then designated president Barack Obama that „[T]he United States will once again engage vigorously in these negotiations, and help lead the world toward a new era of global cooperation on climate change” (Obama 2008), the US position (still under the lead of the Bush administration) did not change at the following *COP 14 summit in Posen 2008*. A further integration of the emerging economies continued to be the major point of concern for the US delegation, as Paula Dobriansky, Under Secretary of State for Democracy and Global Affairs and Head of the US Delegation pointed out:

“I think quite significantly there is a very strong convergence and desire to have an environmentally effective and economically sound international agreement -- one of which the United States is part, one of which developed countries are part, and we undertake our responsibilities, but one in which, also, major emerging economies as well undertake actions that will contribute to the overall goal of reducing greenhouse gas emissions. All must contribute.” (Dobriansky 2008).

After Barack Obama became president in 2009, the rhetoric towards climate change almost completely changed. The new president announced that the USA would take on a leading role in the climate negotiations: “As we stand at this crossroads of history, the eyes of all people in all nations are once again upon us – watching to see what we do with this moment; waiting for us to lead”(Obama 2009a). Obama also highlighted the security concerns and the time pressure associated with climate change: “The security and stability of each nation and all peoples -- our prosperity, our health, and our safety -- are in jeopardy. And the time we have to reverse this tide is running out” (Obama 2009b) (see also: (Ochs 2011: 48; Mildner and Richert 2010: 7)). Likewise, his newly appointed special envoy for climate change – Todd Stern – announced at the 2009 climate talks in Bonn that the USA would recognize its responsibility in the UNFCCC process (Stern 2009). Later that year, the US submitted a paper to the UNFCCC working group on long term cooperative action proposing to include all countries besides the least development ones into a global agreement and to

create a new country category with further duties for emerging economies such as China or India (UNFCCC (United Nations Framework Convention on Climate Change) 2009).

Yet, after various national climate initiatives had failed in Congress (see section 4) the position of Obama's government began to look very similar to those of the previous administration. In the forefront of the upcoming UNFCCC summit in Copenhagen, the official statements were rather conservative and at the climate summit in New York in September 2009 as well as at the G20 summit in Pittsburgh no concrete targets or initiatives were announced (Mildner and Richert 2010: 5). In addition to the UNFCCC process, the US engagement in alternative agreements continued under president Obama. Under the umbrella of the *Major Economies Forum (MEF)*²⁹, an agreement was reached in 2009 in which all participants accepted the two degree goal (Major Economies Forum (MEF) 2009). In the same year, the *U.S.-China Memorandum of Understanding to Enhance Cooperation on Climate Change, Energy and Environment* marked the first step of a closer cooperation between the two biggest emitters (US Department of State 2009b).

At the spectacularly failed *COP 15 2009 in Copenhagen*, a domestically weakened US delegation (Leggett and Lattanzio 2009) continued to insist on non-binding national initiatives and in particular on a stronger integration of emerging economies, first and foremost of China. In the end, the summit failed (the participants could not agree on a common final document and also postponed the negotiations regarding the successor of the Kyoto protocol), which can be, to a considerable extent, attributed to the stalemate between the USA and China over their respective commitments. The finally negotiated *Copenhagen Accord*³⁰ – which the delegates in the plenum only acknowledged – foresaw only voluntary pledges of the industrialized and of some big developing countries as well as a flexible year of reference and hence could be considered as being in the interest of the US (Ochs 2011: 48–50). The voluntary US pledge in the Copenhagen Accord was a 17 per cent GHG reduction until 2020 and up to 83 per cent in 2050 below 2005 levels, which was very similar to the domestic *US American Clean Energy and Security Act* (Climate Action Tracker 2012).

The following *COP 16 negotiations in Cancun 2010* saw no major change in US positions, which can be partly explained by once again failed domestic climate initiatives of the Obama administration and the Republican majority in Congress³¹. The US continued to subscribe to its position of not giving in to binding commitments as long as other big emitters such as China and India would not have to cut

²⁹ A forum for dialogue of the 17 biggest greenhouse gas emitters Major Economies Forum (MEF) (2009).

³⁰ Which had been negotiated mainly in a small circle consisting of the US, China, the EU, India, and South Africa.

³¹ see section 4.

their emissions as well (Ochs 2011: 49–51). The finally adopted *Cancun Agreements* basically reaffirmed the Copenhagen Accord, yet this time a consensus of all participants was accomplished and the summit was eventually framed as fairly successful.

At the second meeting of the UNSC on climate change as security issue in the summer 2011, the United States welcomed the debate and proposed to put climate change onto the international security agenda. The delegate reminded the plenum that President Obama had already addressed the topic as security issue two years ago when he said: “(...) that the security and stability of every nation and every people are in jeopardy. Our prosperity, health and safety are in peril. Time is not just moving ahead; time is running out.” (UNSC (United Nations Security Council) 2011a: 6). During the UNSC meeting the US pointed to the adverse effects of climate change particularly for poor populations but also to the exacerbated risk of instability and conflict, as for example had happened in Sudan. Therefore, the delegate pointed out that the Security Council was indeed one important and legitimate actor in this respect: “The Council needs to be prepared for the full range of crises that may be deepened or widened by the effects of climate change. [...] It is past time for the Security Council to come into the twenty-first century and to assume our core responsibilities.” (UNSC (United Nations Security Council) 2011a: 7).

In the following year – at the *COP 17 in Durban* in 2011 – the USA reaffirmed its previously stated target to reduce its GHGs by 17 per cent below 2005 levels until 2020. However, due to the complicated domestic situation with a divided Congress, at that time it was not clear whether the government would be able to pass national legislation which would reach this target (Climate Action Tracker 2012). Throughout the summit, the US continued to insist on its position to include obligations for the emerging economies and in the end China and other emerging economies agreed to increased efforts from 2020 onwards (Center for Climate and Energy Solutions (C2ES) 2011).

At the *COP 18 2012 in Doha*, the United States agreed to participate in a new UNFCCC regime from 2020 on (the details of this new regime are supposed to be negotiated until 2015), yet no details concerning the legal form and actual commitments were issued. Besides the negotiations concerning this new regime, the US, together with other industrialized countries, rallied strongly against further financial compensations for developing countries regarding already present effects of climate change (called “Loss and Damage”). Furthermore, the summit saw a consensus of the Kyoto members on a second phase of the protocol until 2020 (now consisting of 37 states, of which 27 are EU-countries, and merely accounting for about 15 per cent of worldwide emissions; the United States will continue not to be a party) (Center for Climate and Energy Solutions (C2ES) 2012a).

Since climate change did not play an important role in the 2012 US-presidential election campaign, it remains to be seen whether the topic will be treated with more weight in Obama's second term or whether he will concentrate on other pressing issues such as strengthening the crippled US economy. The almost unchanged US position at the Doha summit indicates the latter (Parnell 2013).

To sum up the preceding sections, *figure 1* gives a graphical overview of the most important US decisions, initiatives, events and actors concerning the domestic and international climate debates since the beginning of the UNFCCC process. *Table 2* (in the appendix) gives a more detailed account of these milestones.

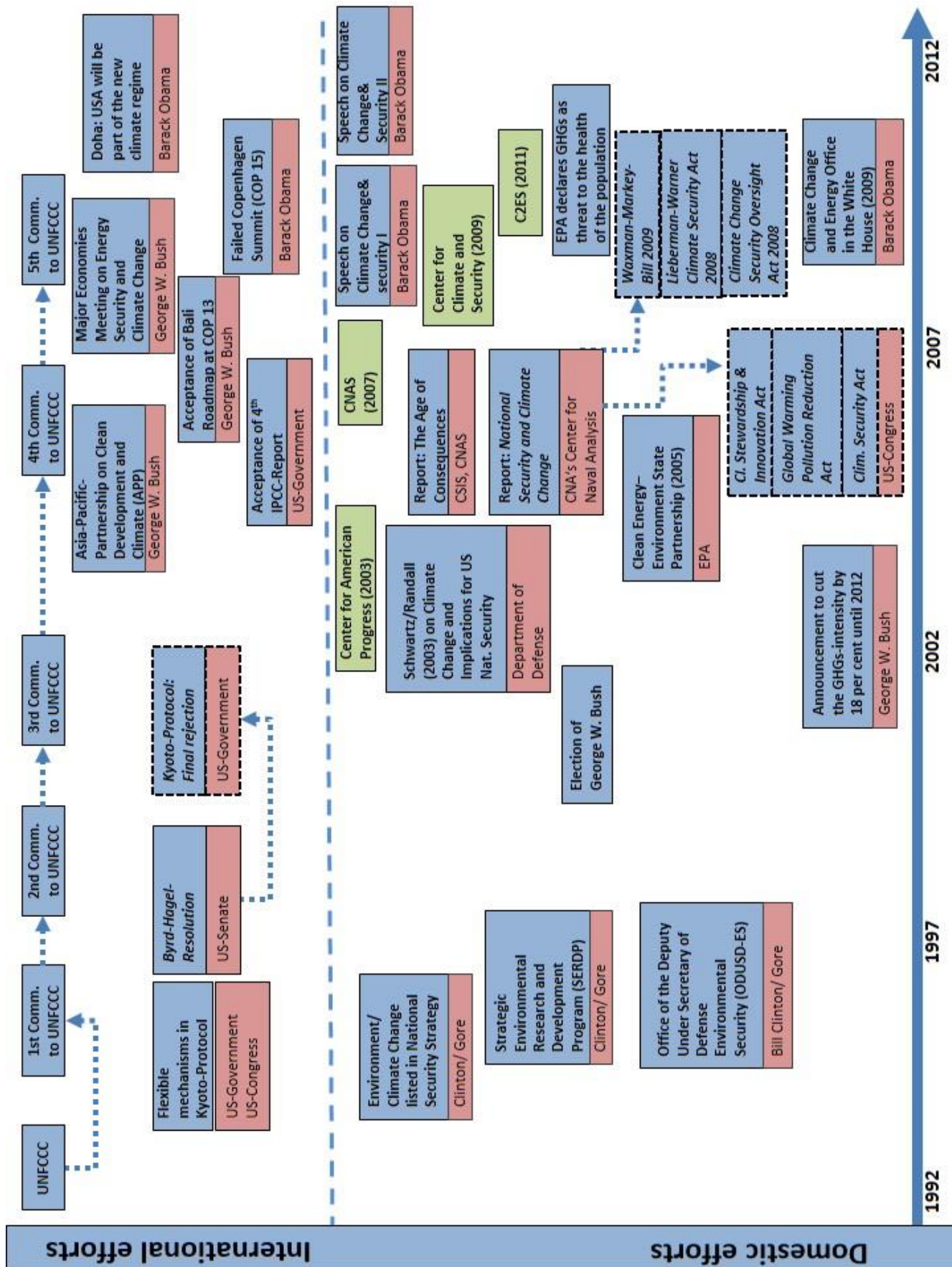


Figure 1

Explanation: Blue = Milestone; Green = Actor founded; Red = Actors involved; Broken line = failed effort

6. Relevant Actors in the Climate Field

This section sheds some light on the most important actors in the US climate politics field. Because of the overall research aim of the *ClimaSec* project, special attention is also given to those actors that have participated in the climate security debate (particularly in the NGO section). To achieve more analytical clarity I distinguish between governmental, civil society, scientific and media actors.

Governmental Actors

Concerning international negotiations and the federal legislation on climate change, the respective administration is the most important *governmental actor*. Due to the structure of the political system of the United States, the administration, i.e. the White House, has much more control over its ministries and agencies than comparable administrations in other countries, and therefore these institutions seldom differ from White House' positions.

Since there is no actual ministry of the environment, the 1970 founded *Environmental Protection Agency* (EPA) is responsible for domestic environmental and climate change issues. Although the EPA is not supposed to actively engage in national climate legislation, it has some authority to decide whether federal or state laws concerning the climate can be enacted (Donner and Faltin 2007: 8). Furthermore, due to the *Clean Air Act*, the EPA is in the position to issue regulations concerning limits of substances that might harm the health of the population. In 2009, several greenhouse gases, including CO₂, have been considered dangerous and could therefore be regulated by the EPA – a possibility that the Obama administration used to shortcut the divided Congress (see section 4).

Further important actors in this arena are the *US Department of Transportation*, the *US Department of Energy*, and the *Energy Regulatory Agency*, which is subordinated to the *Department of Energy*. These actors impact on climate issues by defining regulations and limits concerning certain substances or the transport or the energy sector. Additionally, the *National Oceanic and Atmospheric Administration* (NOAA), which is part of the Department of Commerce, provides the administration and the public with information about all climate phenomena.

In regard to international negotiations, the *US Department of State* (foreign ministry) negotiates in close cooperation with the White House and in the person of the *Special Envoy for Climate Change* (Todd Stern under the Obama administration). However, every legally binding agreement under international law has to be approved by the *Senate* with a two-thirds majority. This directly leads us to the next important actor, the bicameral *US Congress*, consisting of the *Senate* and the *House of Representatives*. This legislative organ of the USA, besides its function when it comes to legally

binding international agreements, is very important in domestic climate legislation³². To be adopted a comprehensive national climate change law has to pass both chambers, which did not yet happen (see section 4). Within Congress, various committees are responsible for climate change, such as the *Select Committee on Energy Independence and Global Warming* and the *Committee on Energy and Commerce* in the House of Representatives, as well as the *Committee on Environment and Public Works* and the *Committee on Energy and Natural Resources* in the Senate³³ (Mildner and Richert 2010: 16).

Further important actors concerning domestic politics are the *federal states* which can issue laws and regulations concerning emission limits or efficiency regulations³⁴. California stood out in this respect and adopted several progressive laws (see section 4) (Donner and Faltin 2007: 11ff), (Mildner and Richert 2010: 30).

Regarding climate policies, the positions of the two *major parties* in the US resembled each other until the 1990s. Since the 1990s, this trend has been reversed. Particularly since the presidency of George W. Bush who constantly denied global warming and openly lobbied for the oil industry, Democrats rather vote for decisive climate legislation, Republicans against. However, both political parties oppose strong binding international commitments (see the *Byrd-Hagel-Resolution* against the Kyoto Protocol) and the voting record of each senator or representative also depends on his local constituency (Harris 2002: 150; Mildner and Richert 2010: 12, 26).

Lastly, the *US Supreme Court* has also influenced climate policies in the past. After the EPA had refused to approve California's stricter emission regulations (under the Bush administration) – the EPA said it was not responsible because CO₂ was not an air pollutant – the court ruled in 2007 that CO₂ emissions do fall under the *Clean Air Act* and can therefore be regulated through the EPA and the federal states (Legal Information Institute 2007).

Civil Society Actors

Looking at *civil society*, an endless number of NGOs and think tanks advocate for environmental issues and participate in climate change debates. Traditionally, they strongly influence this policy field, due to the decentralized and open US-American political system (Falkner 2005: 594), (Harris

³² In the past, the Presidents Clinton, Bush and Obama have experienced a strong opposition of congress regarding climate change legislation, especially when facing a divided Congress Donner and Faltin (2007: 9).

³³ There are other Committees that are not directly concerned with climate change but nevertheless influence on these debates. For an overview please consult *table 3* at the end of this section.

³⁴ According to the *Commerce Clause* of the US constitution, all areas that are not particularly regulated on the federal level automatically fall under the jurisdiction of the states Legal Information Institute (2013).

2002: 155f). Among these NGOs are well-known and globally active NGOs such as *Greenpeace* and *WWF*, major national environmental organizations for instance the *Sierra Club* and various business associations.

Concerning the climate debates in the US in the last couple of years, the following organizations are of special importance³⁵: *The Center for Climate and Energy Solutions (C2ES)* which is a nonpartisan, non-profit organization financed through private and corporate donations with the aim to advance strong policies in regard to climate change and energy issues. The organization keeps track of all relevant Congress debates and decisions and also issues reports on the topic³⁶. Furthermore, it has a section on Climate Change and National Security, which might be of special relevance for our research approach. *The Environmental Defense Fund (EDF)* also works on a non-profit and non-partisan basis and is financed through private donations. It specializes in environmental issues and seeks to provide solutions to the most urgent environmental problems. In regard to climate change, it concentrates on green energy, low carbon technologies and energy efficiency issues but has also delivered some information on climate security debates³⁷. *The Natural Resources Defense Council (NRDC)* is as well organized on a non-profit, non-partisan basis but is funded through membership fees and private as well as government donations. Additionally, it can resort to over 1.3 million members and about 400 lawyers, scientists and other experts that work to advance its goals. It has a rather broad environmental agenda, but has also worked and published on various climate issues such as clean energy, energy security, sustainability issues and climate security debates³⁸.

Particularly, when it comes to climate-security-debates that gained momentum since the mid-2000s, several think tanks³⁹ had a considerable impact on the debate. These think tanks often employ former government personnel and military staff and are therefore biased towards highlighting the security implications of climate change and consequences for national security. Another effect of their unique staff recruitment strategies is a sometimes very close connection between these think tanks and political, military and defense circles. Also, due to their usage of certain keywords and concepts such as “national security” it seems that the influence of these think tanks on the climate-

³⁵ The relevance of organizations in the climate debates is assessed by using secondary literature as well as the indicators: size and membership basis of the organisation, annual income and respective publication output.

³⁶ Center for Climate and Energy Solutions (C2ES) (2009a), (2013b).

³⁷ Kreindler (2009).

³⁸ Altman (2010).

³⁹ Most of these think tanks are repeatedly mentioned in the secondary literature, for example in: Nagel (2011); Detraz and Betsill (2009); Harris (2002); Falkner (2005); Hartmann (2010); Brzoska (2009), Briggs (2012).

security debates in the political circles is rather strong⁴⁰. The most relevant think tanks in this respect are the following: The *CNA* which is a federally funded think tank consisting of two subsections, the *Center for Naval Analysis* and the *Institute for Public Research*. The organization specializes in defense, military and especially in navy issues and mainly consists of former military staff. Concerning climate change, CNA's Center for Naval Analysis issued a report on climate change as a national security issue in 2007⁴¹, which can be considered one of the most influential reports in US climate-security-debates as well as in academic research about the securitisation of climate change. Another important contribution⁴² to the climate-security-debates has been published by the *Center for a New American Security (CNAS)* in collaboration with the *Center for Strategic and International Studies (CSIS)*. The *CNAS* is a 2007 founded US think tank specialized in defense and national security policies and funded through individuals, corporations and public foundations. The *CSIS* is also organized as staff based, non-partisan, non-profit think tank and was founded in 1987. It is funded through individual, corporate and government contributions and specializes in foreign policy, political, economic as well as security issues. Continuing this list of think tanks, the *RAND Corporation* is the oldest (founded in 1946) and also largest US think tank (about 1700 staff members). It is a non-profit, non-partisan research institution whose aim is to improve policy-making and to support the US government and its ministries with expertise on a range of issues including climate change. It has also issued several reports concerning climate-security-debates⁴³. The *Center for Climate and Security* is a think tank consisting mostly of former military and security personnel and was founded in 2009. It aims at raising attention for the climate-security discourse through the collection and issuing of various publications and blogs on the issue⁴⁴. The *Center for American Progress* is a 2003 founded, independent and non-partisan educational institute, funded through a variety of sources including individuals, corporations and foundations. It concentrates on various challenges of the 21st century including climate, energy and migration issues and has issued several reports concerning climate change and security. The *Council on Foreign Relations* is organized as an independent, non-partisan think tank as well. It can resort to its own staff and supporting members and specializes in foreign policy issues. It is funded through membership fees as well as individual, corporate and government contributions. The council is one of the most influential US think tanks, it publishes the well-known journal "Foreign Affairs" and has issued several important reports⁴⁵ in regard to climate change. The *Wilson Center* was originally founded in 1968 and since 1994 also works on climate issues in the

⁴⁰ One interesting observation is made by Joane Nagel (2011), who finds that while there still is a considerable scepticism within the US public concerning climate change, US military institutions and think tanks close to the military cannot at all be considered climate sceptics Nagel (2011: 206).

⁴¹ CNA Corporation (2007).

⁴² Campbell *et al.* (2007).

⁴³ Treverton *et al.* (2012).

⁴⁴ Center for Climate and Security (2013); Femia and Werrell (2012).

⁴⁵ Busby (2007).

Environmental Change and Security Program. It concentrates on the relations between environmental, population and health dynamics and their connections to conflict, human security and foreign policy issues. The Center organizes various events, blogs, conducts research and has issued several reports on climate topics⁴⁶. The *George C. Marshall Institute* is a conservative think tank, founded 1984 and financed through various foundations and individual contributors. It originally concentrated on defense issues but has also worked on environmental issues in the last three decades. It has put forward a rather skeptical view, often disputing mainstream scientific positions on climate change. Its reports and events have therefore played a major role in the argumentation of US climate skeptics⁴⁷. Finally, the *American Security Project*, is a non-profit, non-partisan think tank, dedicated to fostering knowledge and understanding on a various national security issues. It was founded in 2007, has approximately 20 staff members and an annually income of about \$800.000 through donations. It has issued several reports on the connections between climate change and security with a particularly military focus⁴⁸.

Concerning the *scientific sector* besides the renowned universities and an endless number of public and private research institutes, some important actors are the *Strategic Studies Institute of the US Army War College*⁴⁹ as well as individual scholars⁵⁰ who have written on the issue, for instance Paul G. Harris, Robert Falkner, Robyn Eckersley, Amy Lynn Fletcher, Chad Briggs, Aaron M. McCright, Joane Nagel, Stacy Rosenberg, Rita Floyd and Betsy Hartmann⁵¹. Although still being considerably influential compared to other countries, climate sceptical positions have decreased in the US as well and the majority of scientist put forward positions in line with the IPCC consensus (Rosenberg *et al.* 2010: 324).

Looking at the *media sector* in the US besides the well-known newspapers such as the *New York Times* or the *Wall Street Journal* there exists a fairly active blogging scene which, unlike in Europe, is rather influential and sophisticated and often tackles climate change issue. One important actor within the media-field is the *Operation Free*, a 2009 formed coalition of veterans and national security organizations that sees climate change and energy issues as threats to the US national security. The operation is financed through membership fees and public as well as private donators.

⁴⁶ Wilson Center (2013); Dabelko (2009).

⁴⁷ Kueter (2012). For further information on civil society actors rallying against mainstream positions on climate change see Rosenberg *et al.* (2010: 212).

⁴⁸ Foley and Holland (2012), ASP (2012), Vagg (2012) Finel and Bart (2012).

⁴⁹ Pumphrey (2008).

⁵⁰ Here I include scholars from the US as well as from abroad who have written on US climate politics and particularly on the connections between climate change and security.

⁵¹ Harris (2002); Falkner (2005); Eckersley (2007); Fletcher (2009); Briggs (2012); McCright and Dunlap (2011); Nagel (2011); Rosenberg *et al.* (2010); Floyd (2010); Hartmann (2009), (2010).

Invoking an elaborate media campaign (TV, Blogs, Radio, Internet and Print), it tries to raise the public's and policy maker's awareness for the threats of climate change and energy, for example foreign oil dependency.

Table 3 (in the appendix) sums up the preceding chapter and gives a brief overview of the most relevant actors in the US taking part in climate debates, especially considering the climate-security-nexus.

7. Conclusion

The first important finding of the analysis of domestic and international climate policies in the US is the divided nature of the US case. While at the state level several effective and sometimes fairly progressive laws and regulations were enacted, at the federal level not even a single successful legislation has been reached. Under the administration of George W. Bush, climate issues played only a minor role. And even though the rhetoric changed completely since Barack Obama became president in 2009 and several attempts to bring laws into Congress were carried out, the Obama administration has so far not lived up to the great expectations regarding climate policies.

Nevertheless, another important observation is that the climate-security-debate that is ongoing since the mid-2000s – and in which national security conceptions and a focus on the military sector overweigh – has raised attention for the topic in the general public and in political circles. Even though no national legislation has been reached, attempts for climate laws in Congress have increased dramatically during recent years. The climate-security-nexus seems to act as a common nominator between rather conservative-defense oriented circles and more liberal-environmentalist actors and therefore helps bridging the divide between Republicans and Democrats that had been building up especially during the George W. Bush government. The linking of the environment with security concerns during the Clinton era has already shown that such a strategy can be successful and is able to trigger important changes in the policy field. However, concerning climate change this effect seems to be restricted to the domestic realm to this point. Looking at international climate negotiations, the increase in attention and the various state level initiatives could so far not be translated into more ambitious US commitments in the UNFCCC process.

Regarding the relevant actors, the often rather confrontational position of Congress vis-à-vis the administration in general and its fairly strong standing within US politics has proven to be true also for climate change matters. Even under President Obama who has been quite sympathetic to more progressive climate laws and considering various Democratic and even bi-partisan attempts for a

national climate law no federal legislation could be reached. As a result of this stalemate, the EPA emerged as important actor in the climate field, enabling the administration to enact several regulations on the basis of the clean air act and thus circumventing Congress. Looking at civil society, besides various environmental NGOs, think tanks have played a major role in the discussions of climate change, especially when it comes to the connections between climate change and security. Important reasons could be fairly high financial potency, close connections between political and military personnel and the think tank staff and the orientation towards security issues of many think tanks.

Concerning further research, these insights suggest that one should not only concentrate on the international behavior of the US when looking for the effects of the securitisation of climate change, but should also focus on the developments on the domestic front. Moreover, because the most interesting and progressive legislation has so far been passed at the state level, a thorough analysis has to take these initiatives into account and also look at securitisation effects at this level. Thus, what at first sight might look like a failed securitization, at least with regards to its practical outcomes for the US international climate policies, could have in fact triggered important changes on the domestic and state level. The task is now to unravel the fairly complicated political process in the US to trace back how exactly the climate-security-debates have influenced the policy making process and which actors were most influential.

Another important point is the discussion on energy security and independence which started in the second term of the Bush administration and has continued under Obama. For these discussions constantly get mixed up with climate security arguments. Here the question arises whether this development has to be regarded as distinct securitization process, which could even draw attention from climate issues, or if these two processes can be seen as mutual reinforcing.

Furthermore, concerning the civil society actors, think tanks and their close connections to the defense and political sector should be scrutinized in particular. The considerable influence of these (often military centered) think tanks on the debate is certainly one important factor in explaining the predominantly military or national security focused framing of climate security discourses in the US. However, other accounts of the connection between climate change and security should not be neglected.

References

- Altman, P. (2010) Climate Change and National Security, available at http://switchboard.nrdc.org/blogs/paltman/climate_change_and_national_se.html, accessed 26 March 2013.
- Asia Pacific Partnership (2012) Welcome to the Asia-Pacific Partnership on Clean Development and Climate, available at <http://www.asiapacificpartnership.org/english/default.aspx>, accessed 28 March 2013.
- ASP (2012) About. American Security Project: fostering dialogue, exploring viewpoints and engaging Americans where they live, available at <http://americansecurityproject.org/about/>, accessed 5 September 2012.
- BAFU Schweiz (2007) Die Bali-Roadmap: Themen und Fahrplan, available at <http://www.bafu.admin.ch/dokumentation/fokus/05968/06000/index.html?lang=de>, accessed 14 February 2013.
- Bang, G., Heggelund, G. and Vevatne, J. (2005) *Shifting strategies in the global climate negotiations*.
- Barnett, A. (2004) 'Bush attacks environment 'scare stories' Bush attacks environment 'scare stories'. Secret email gives advice on denying climate change', *The Guardian*, 4 April.
- Barnett, J. and Adger, N.W. (2007) 'Climate Change, Human Security and Violent Conflict', *Political Geography* 26: 639–655.
- Bastasch, M. (2012) 'What's in store for climate change policy in Obama's second term?', *The Daily Caller*, 10 November.
- Becker, M. (2007) 'Happy Ending on Bali Climate Change Deal Reached after US U-Turn', *Spiegel Online*, 15 December.
- Below, A. (2007) 'The Missing Link: Regionalism as a First Step Toward Globalizing U.S. Environmental Security Policy', *Politics & Policy* 35(4): 702–715.
- Briggs, C.M. (2012) 'Climate Security, Risk Assessment and Military Planning', *International Affairs* 88(5): 1049–1064.
- Brzoska, M. (2009) 'The Securitization of Climate Change and the Power of Conceptions of Security', *Sicherheit und Frieden* 27(3): 137–145.
- Brzoska, M. (2012) 'Climate Change as a Driver of Security Policy', in J. Scheffran, M. Brzoska, H.-G. Brauch, M.P. Link and J.P. Schilling (eds.) *Climate Change, Human Security and Violent Conflict. Challenges for Societal Stability*, Berlin: Springer, pp. 165–179.
- Brzoska, M. and Oels, A. (2011) "'Versicherheitlichung" des Klimawandels? Die Konstruktion des Klimawandels als Sicherheitsbedrohung und ihre politischen Folgen', in M. Brzoska, M. Kalinowski, V. Matthies and B. Meyer (eds.) *Klimawandel und Konflikte. Versicherheitlichung versus präventive Friedenspolitik?*, Baden-Baden: Nomos, pp. 51–67.
- Burck, J., Hermwille, L. and Krings, L. (2012) *The Climate Change Performance Index. Results 2013*. Bonn, Berlin.
- Busby, J.W. (2007) *Climate Change and National Security. An Agenda for Action*.
- Buzan, B., Wæver, O. and Wilde, J. de (1998) *Security. A New Framework for Analysis*. Boulder, Colo.: Lynne Rienner.
- Campbell, K.M., Gullledge, J., McNeill, J., Podesta, J., Odgen, P., Fueth, L., Woolsey, R.J., Lennon, A.T.J., Smith, J., Weitz, R. and Mix, D. (2007) *The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change*. Washington D.C.

- Center for Climate and Energy Solutions (C2ES) (2008) Legislation in the 110th Congress Related to Global Climate Change, available at <http://www.c2es.org/federal/congress/110>, accessed 8 March 2013.
- Center for Climate and Energy Solutions (C2ES) (2009a) *Biref: National Security Implications of Global Climate Change*.
- Center for Climate and Energy Solutions (C2ES) (2009b) The American Clean Energy and Security Act (Waxman-Markey Bill), available at <http://www.c2es.org/federal/congress/111/acesa>, accessed 8 March 2013.
- Center for Climate and Energy Solutions (C2ES) (2011) *Outcomes of the U.N. Climate Change Conference in Durban, South Africa*. Arlington.
- Center for Climate and Energy Solutions (C2ES) (2012a) *Outcomes of the U.N. Climate Change Conference in Doha, Qatar*. Arlington.
- Center for Climate and Energy Solutions (C2ES) (2012b) Renewable & Alternative Energy Portfolio Standards, available at <http://www.c2es.org/us-states-regions/policy-maps/renewable-energy-standards>, accessed 8 March 2013.
- Center for Climate and Energy Solutions (C2ES) (2012c) State Legislation from Around the Country, available at <http://www.c2es.org/us-states-regions/key-legislation>, accessed 8 March 2013.
- Center for Climate and Energy Solutions (C2ES) (2013a) Climate Debate in Congress (1999-2013), available at <http://www.c2es.org/federal/congress>, accessed 8 March 2013.
- Center for Climate and Energy Solutions (C2ES) (2013b) National Security and Climate Change, available at <http://www.c2es.org/science-impacts/national-security>.
- Center for Climate and Security (2013) Climate and Security Resources, available at <http://climateandsecurity.org/resources/>, accessed 26 March 2013.
- Christian Aid (2007) *Human Tide: The Real Migration Crisis*.
- Clarke, S. (2005) 'Bush acknowledges 'problem' of global warming', *The Guardian*, 6 July.
- Climate Action Tracker (2012) *USA: Country Assessment*.
- CNA Corporation (2007) *National Security and the Threat of Climate Change*. Alexandria.
- CSIS (Center for Strategic & International Studies) and CNS (Center for a New American Security) (2007) *The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change*.
- Dabelko, G.D. (2009) *Environment and Security Programme. Report Issue 13 2008-2009*.
- Detraz, N. and Betsill, M.M. (2009) 'Climate Change and Environmental Security: For Whom the Discourse Shifts', *International Studies Perspectives* 10(3): 303–320.
- Dobriansky, P. (2008) Press Briefing Following the the Fourteenth Session of the Conference of the Parties to the UN Framework Convention on Climate Change, available at <http://2001-2009.state.gov/g/rls/rm/113171.htm>, accessed 28 March 2013.
- Donner, S. and Faltin, F. (2007) *Klimapolitische Entwicklungen in den USA. Initiativen auf bundesstaatlicher und regionaler Ebene - Info Brief -*. Berlin.
- Dröge, S. (2012) 'Die Klimaverhandlungen in Durban. Erfolgreiche Diplomatie, aber kein Fortschritt für den Klimaschutz', *SWP Aktuell* 3(Januar 2012): 1–4.
- Eckersley, R. (2007) 'Ambushed: The Kyoto Protocol, the Bush Administration's Climate Policy and the Erosion of Legitimacy', *International Politics* 44(2/3): 306–324.
- Environmental Protection Agency (EPA) (2009) Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, available at <http://www.epa.gov/climatechange/endangerment/index.html>, accessed 8 March 2013.
- Environmental Protection Agency (EPA) (2010) *FY 2010 EPA Budget in Brief*.

- Environmental Protection Agency (EPA) (2012) Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule Step 3 and GHG Plantwide Applicability Limits. Final Rule, available at <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2009-0517-19308>, accessed 8 March 2013.
- Environmental Protection Agency (EPA) (2013a) Regulatory Initiatives Regarding Climate Change, available at <http://www.epa.gov/climatechange/EPAactivities/regulatory-initiatives.html>, accessed 8 March 2013.
- Environmental Protection Agency (EPA) (2013b) State and Local Climate and Energy Program, available at <http://www.epa.gov/statelocalclimate/index.html>, accessed 8 March 2013.
- Falkner, R. (2005) 'American Hegemony and the Global Environment', *International Studies Review* 7: 585–599.
- Femia, F. and Werrell, C. (2012) Climate and Security 101: Why the U.S. National Security Establishment Takes Climate Change Seriously, available at <http://climateandsecurity.org/2012/04/25/climate-and-security-101-why-the-u-s-national-security-establishment-takes-climate-change-seriously/>, accessed 26 March 2013.
- Finel, B.I. and Bart, C. (2012) *Climate Security Index*.
- Fletcher, A.L. (2009) 'Clearing the air: the contribution of frame analysis to understanding climate policy in the United States', *Environmental Politics* 18(5): 800–816.
- Floyd, R. (2010) *Security and the environment. Securitisation theory and US environmental security policy*. Cambridge: Cambridge University Press.
- Foley, C. and Holland, A. (2012) *Climate Security Report*.
- Global Adaptation Institute (2012) Gain Index, available at <http://index.gain.org/>, accessed 20 December 2012.
- Greenhouse, L. (2007) 'Justices Say E.P.A. Has Power to Act on Harmful Gases', *New York Times*, 3 April.
- Harmeling, S. and Eckstein, D. (2012) *Global Climate Risk Index 2013. Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2011 and 1992 to 2011*. Bonn, Berlin.
- Harris, P.G. (2002) 'Environmental Security: Will Bush Follow Clinton's Lead?', *Pacifica Review: Peace, Security & Global Change* 14(2): 149–157.
- Hartmann, B. (2009) *Lines in the Shifting Sand. The Strategic Politics of Climate Change, Human Security and National Defense*. Oslo.
- Hartmann, B. (2010) 'Rethinking Climate Refugees and Climate Conflict: Rethoric, Reality and the Politics of Policy Discourse', *Journal of International Development* 22: 233–246.
- Homer-Dixon, T. (1994a) 'Environmental Scarcities and Violent Conflict: Evidence from Cases', *International Security* 19(2): 233–246.
- Homer-Dixon, T. (1999) *Environment, Scarcity and Violence*. Princeton: Princeton University Press.
- Homer-Dixon, T.F. (1994b) 'Environmental Scarcities and Violent Conflict: Evidence from Cases', *International Security* 19(1): 5–40.
- International Energy Agency (IEA) (2012) *World Energy Outlook 2012. Zusammenfassung. German Translation*. Paris.
- Kaplan, R. (1994) 'The Coming Anarchy: How Scarcity, Crime, Overpopulation, Tribalism, and Disease are Rapidly Destroying the Social Fabric of our Planet', *The Atlantic Monthly* 273(2): 44–76.
- Kreindler, T. (2009) National Security: Climate Bill Protects America, available at <http://blogs.edf.org/climate411/2009/08/11/national-security-climate-bill-protects-america/>, accessed 26 March 2013.
- Kueter, J. (2012) *Climate and National Security: Exploring the Connection*.

- Legal Information Institute (2007) Supreme Court of the United States: Massachusetts et al. v. Environmental Protection Agency et al., available at <http://www.law.cornell.edu/supct/html/05-1120.ZS.html>, accessed 28 March 2013.
- Legal Information Institute (2013) Commerce Clause, available at http://www.law.cornell.edu/wex/commerce_clause, accessed 28 March 2013.
- Leggett, J. and Lattanzio, R. (2009) *Status of the Copenhagen Climate Change Negotiations*.
- Major Economies Forum (MEF) (2009) Declaration of the Leaders of the Major Economies Forum on Energy and Climate, available at http://portal3.sre.gob.mx/groupfive/images/stories/laquila/MEF_Declarationl.pdf, accessed 28 March 2013.
- Mathews, J.T. (1989) 'Redefining Security', *Foreign Affairs* 68(2): 162–177.
- McCright, A. and Dunlap, R.E. (2011) 'The Politicization of Climate Change and Polarization in the American Public's View of Global Warming, 2001-2010', *The Sociological Quarterly* 52: 155–194.
- McDonald, M. (2005) *Discourses of Security and Environmental Change*. Hawaii.
- McDonald, M. (2008) 'Securitization and the Construction of Security', *European Journal of International Relations* 14(4): 563–587.
- Methmann, C. and Oels, A. (2013 (in press)) 'The vulnerable becoming dangerous: Rethinking the history of environmental security from conflict to resilience', in C. Daase, G. Schlag and J. Junk (eds.) *Dialogues on Security: Theoretical, Methodological, and Empirical Advances and Challenges*. Routledge, London: Routledge.
- Methmann, C. and Rothe, D. (2012) 'Politics for the Day after Tomorrow: The Logic of Apocalypse in Global Climate Politics', *Security Dialogue* 43(4): 323–344.
- Mildner, S.-A., Petersen, H. and Wodni, W. (2012) 'Klimaschutz bleibt Nebensache für die USA', *SWP Aktuell* 69(November 2012).
- Mildner, S.-A. and Richert, J. (2010) 'Obamas neue Klimapolitik. Möglichkeiten und Grenzen eines klimapolitischen Wandels in den USA', *SWP Studie* Februar 2010.
- Müller, F. (2003) *Kyoto-Protokoll ohne USA - wie weiter?*
- Myers, N. (1995) *Environmental Exodus: An Emergent Crisis in the Global Arena*. Washington, DC: The Climate Institute.
- Myers, N. (2002) 'Environmental Refugees. A Growing Phenomenon of the 21st Century', *Philosophical Transaction of the Royal Society: Biological Sciences* 357: 609–613.
- Nagel, J. (2011) 'Climate Change, Public Opinion and the Military Security Complex', *The Sociological Quarterly* 52: 203–211.
- Obama, B. (2008) President-elect Barack Obama to deliver taped greeting to Bi-partisan Governors Climate Summit, available at http://change.gov/newsroom/entry/president_elect_barack_obama_to_deliver_taped_greeting_to_bi_partisan_gover/, accessed 28 March 2013.
- Obama, B. (2009a) Remarks of President Barack Obama – As Prepared for Delivery Address to Joint Session of Congress Tuesday, February 24th, 2009, available at http://www.whitehouse.gov/the_press_office/remarks-of-president-barack-obama-address-to-joint-session-of-congress/, accessed 28 March 2013.
- Obama, B. (2009b) 'Obama's Speech on Climate Change', *New York Times*, 22 September.
- Ochs, A. (2011) 'Länderperspektive: Die Vereinigten Staaten', in N. Netzer and J. Gouverneur (eds.) *Zwischen Anspruch und Wirklichkeit : Internationale Perspektiven vor der Weltklimakonferenz in Durban*, Berlin: Friedrich-Ebert-Stiftung, pp. 47–53.

- Oels, A. (2012) 'From 'Securitization' of Climate Change to 'Climatization' of the Security Field: Comparing Three Theoretical Perspectives', in J. Scheffran, M. Brzoska, H.-G. Brauch, M.P. Link and J.P. Schilling (eds.) *Climate Change, Human Security and Violent Conflict. Challenges for Societal Stability*, Berlin: Springer, pp. 185–205.
- Parnell, J. (2013) Same old story from USA and Obama at UN climate talks, available at <http://www.rtcc.org/same-old-story-from-usa-and-obama-at-un-climate-talks/>, accessed 28 March 2013.
- Pew Research Center (2012) *Tough Stance on Iran Endorsed. Public Priorities: Deficit Rising, Terrorism Slipping*. Washington D.C.
- Pew Research Center (2013) *Climate Change and Financial Instability Seen as Top Global Threats*. Washington D.C.
- Pumphrey, C. (2008) *Global climate change: National security implications*. Carlisle: Strategic Studies Institute, U.S. Army War College.
- Reuveny, R. (2007) 'Climate Change-Induced Migration and Violent Conflict', *Political Geography* 26: 656–673.
- Richert, J. (2009) *Klimawandel und Sicherheit in der Amerikanischen Politik*. Berlin.
- Rosenberg, S., Vedlitz, A., Cowman, D.F. and Zahran, S. (2010) 'Climate change: a profile of US climate scientists' perspectives', *Climatic Change* 101(3-4): 311–329.
- Rothe, D. (2011) 'Managing Climate Risks or Risking a Managerial Climate: State, Security and Governance in the International Climate Regime', *International Relations* 25(3): 330–345.
- Rothe, D. (2012) 'Security as a Weapon: How Cataclysm Discourses Frame International Climate Negotiations', in J. Scheffran, M. Brzoska, H.-G. Brauch, M.P. Link and J.P. Schilling (eds.) *Climate Change, Human Security and Violent Conflict. Challenges for Societal Stability*, Berlin: Springer, pp. 243–258.
- Schwartz, P. and Randall, D. (2003) *An Abrupt Climate Change Scenario and Its Implications for United States National Security*. Washington D.C.
- Smith, D. and Vivekananda, J. (2007) *A climate of conflict. The links between climate change, peace and war*. [London]: International Alert.
- Stern, N. (2006) *Stern Review on the Economics of Climate Change*. London.
- Stern, T. (2009) Press briefing transcript follows Todd Stern's prepared remarks, available at <http://www.usclimatenetwork.org/resource-database/Todd%20Stern%20Opening%20Plenary%20Remarks.pdf>, accessed 28 March 2013.
- The Library of Congress (2005) Congressional Record 109th Congress (2005-2006). Climate Negotiations in Montreal-- (Senate - December 20, 2005), available at <http://thomas.loc.gov/cgi-bin/query/z?r109:S20DE5-0015:>, accessed 28 March 2013.
- The National Center for Public and Policy Research (1997) Byrd-Hagel Resolution, available at <http://www.nationalcenter.org/KyotoSenate.html>, accessed 28 March 2013.
- Treverton, G.F., Nemeth, E. and Srinivasan, S. (2012) *Threats Without Threateners? Exploring Intersections of Threats to the Global Commons and National Security*. Santa Monica.
- UNFCCC (United Nations Framework Convention on Climate Change) (2007) *Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007 Addendum Part Two: Action taken by the Conference of the Parties at its thirteenth session CONTENTS Decisions adopted by the Conference of the Parties*. Bali.
- UNFCCC (United Nations Framework Convention on Climate Change) (2009) *Ideas and proposals on the elements contained in paragraph 1 of the Bali Action Plan Submissions from Parties Part II*.

UNFCCC (United Nations Framework Convention on Climate Change) (2013) Status of Ratification of the Kyoto Protocol, available at http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php, accessed 28 March 2013.

UNGA (United Nations General Assembly) (2009a) *Resolution Adopted by the General Assembly. Climate Change and its Possible Security Implications, A/RES/63/281*. New York.

UNGA (United Nations General Assembly) (2009b) *Climate Change and its Possible Security Implications. Report of the Secretary-General, A/64/350 (2009)*. New York.

UNGA (United Nations General Assembly) (2008) *Resolution Adopted by the General Assembly. Protection of Global Climate for Present and Future Generations of Mankind, A/RES/62/86*. New York.

United States Climate Action Partnership (USCAP) (2013) Organization Homepage, available at <http://www.us-cap.org/>, accessed 8 March 2013.

United States Government (2010) *Quadrennial Defense Review Report 2010*.

United States Senate (2013) Glossary: Filibuster, available at http://www.senate.gov/reference/glossary_term/filibuster.htm, accessed 27 March 2013.

UNSC (United Nations Security Council) (2007a) *5663rd meeting, Tuesday, 17 April 2007, 10 a.m. New York*. New York.

UNSC (United Nations Security Council) (2011a) *6587th meeting, Wednesday, 20 July 2011, 10 a.m. New York*. New York.

US Department of State (2009a) Appointment of Special Envoy on Climate Change Todd Stern, available at <http://www.state.gov/secretary/rm/2009a/01/115409.htm>, accessed 8 March 2013.

US Department of State (2009b) U.S.-China Memorandum of Understanding to Enhance Cooperation on Climate Change, Energy and the Environment, available at <http://www.state.gov/documents/organization/126802.pdf>, accessed 28 March 2013.

Vagg, X. (2012) *American Security: The Impact of Climate Change*. Washington D.C.

Wilson Center (2013) Environmental Change and Security Program (ECSP), available at <http://www.wilsoncenter.org/about-ecsp>, accessed 26 March 2013.

World Bank (2012) Country Indicators: United States of America, available at <http://data.worldbank.org/country/united-states>, accessed 8 March 2013.

World Bank (2013) CO2 emissions (kt), available at <http://data.worldbank.org/indicator/EN.ATM.CO2E.KT/countries>, accessed 2 April 2013.

Yamin, F. and Depledge, J. (2004) *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures*. Cambridge: Cambridge University Press.

Appendix

Table 2: Milestones of US Domestic and International Climate Debates		
Year/Date	Domestic	International
1979		First World Climate Conference in Geneva
1988		Establishment of the IPCC
1991	Climate Change is mentioned in NSS amongst other environmental topics for the first time	
1992		Signing and ratification of the UNFCCC
1994	Climate Change is explicitly mentioned as security threat in the NSS	
1997		Byrd-Hagel Resolution: US-Senate votes against plans for binding commitments of the USA and non-binding commitments of developing countries as suggested in the Kyoto Protocol
1997		Due to pressure from the US: Integration of flexibility mechanisms into Kyoto protocol (CDM, Joint-Implementation, Emissions-Trading)
1997		Signing of the Kyoto Protocol by the Clinton administration
2001		Final rejection of the Kyoto Protocol in Congress shortly after George W. Bush became president
2002		The Bush administration announces to cut the GHGs-intensity (GHG in relation to the GDP) by 18 per cent until 2012 – which means a slower increase in GHGs
2003	Begin of climate security debates: Schwartz and Randall Report: <i>An Abrupt Climate Change Scenario and Its Implications for United States National Security</i>	
2005	Bush finally accepts some anthropogenic influence on the climate	
2005	Clean Energy–Environment State Partnership: Action plans on clean energy and environment on the state level	
2005		Asia-Pacific-Partnership on Clean Development and Climate is announced
2007		4th report of the IPCC is accepted by the US administration, therefore the US accepts the scientific consensus
2007, January	Nancy Pelosi creates the Special Committee on Energy Independence and Global Warming	
2007, January	Climate Stewardship and Innovation Act proposed: GHG cuts from 2012 until 2050 by one third compared to the year 2000	
2007, January	Global Warming Pollution Reduction Act – did not pass the responsible committee	
2007, April	<i>Center for Naval Analysis (CNA)</i> issues much noticed report concerning the security implications of climate change: <i>National Security and the Threat of Climate Change</i>	

2007 April		1st Debate in UN Security Council on climate change as threat to international peace and security
2007, September		Major Economies Meeting on Energy Security and Climate Change established (in 2009 renamed in Major Economies Forum on Energy and Climate)
2007, October	Climate Security Act: (until 2050 by 63 per cent compared to 2005) - 2008 rejection in Senate	
2007, November	The Center for Strategic Studies (CSIS) and the Center for a New American Security (CNAS) issue a joint report on climate security: <i>The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change</i>	
2007, December		COP 13 in Bali: USA accepts Bali Roadmap due to pressure from other states
2008	Obama and McCain mention climate change in their election campaigns	
2008	New Energy for America: Obama/Biden plan on renewable energy and climate change is put forward in the presidential election campaign	
2009	EPA declares GHGs as threat to the health of the population	
2009, January		More active role of the USA in international climate negotiations. Inclusion of the USA in Post-Kyoto is announced
2009	White House Office of Energy and Climate Change Policy is established – shut down by congress in April 2011 (stopped funding)	
2009, January	Todd Stern is appointed as special envoy for climate change in the foreign office	
2009, March		Major Economies Forum on Energy and Climate (MEF) established
2009, June	The American Clean Energy and Security Act of 2009 (ACES) is approved in the House of Representatives but rejected in Senate	
2009, September	Obama gives important speech on Climate Change and Security I	
2009, December		Copenhagen (COP15) Summit: USA and China responsible for failure, Copenhagen Accords. Pledge: -17 per cent GHGs in 2020 + -83 per cent in 2050 based on 2005.
2010, November	Midterm congress elections: Obama loses majority in Senate	
2010, December		Cancun (COP16) Summit: Cancun Agreements reaffirm Copenhagen Accords
2011 July		2st Debate in UN Security Council on climate change as threat to international peace and security
2012	Obama Wins Election: New momentum for climate change topics in the US?	
2012, December		Doha (COP18) Summit: USA will be part of the new climate regime from 2020 on – no details known so far

2013 June	Obama gives important speech on Climate Change and Security II (in Berlin and Washington)	
--------------	---	--

Table 3: Overview of the Most Important Actors		
Governmental Actors		
Name	Actor Info	Type
White House Office of Energy and Climate Change Policy	Created under Obama, coordinates climate and energy topics (closed down by Congress in 2011) <i>Director:</i> Carol Browner (under Clinton EPA director)	Government Executive branch Federal level
US Department of State (State Department; Foreign Ministry)	Particularly relevant for the international climate negotiations <i>Secretary:</i> Chuck Hagel <i>Special Envoy for Climate Change:</i> Todd Stern (<i>vice:</i> Jonathan Pershing). The special envoy leads the international climate negotiation team of the US – associated with the state department	Government Executive branch Federal level
Environmental Protection Agency (EPA)	Founded 1970. Responsible for the protection of the environment (Water, Land, Air) – domestic climate/pollution regulation – resides in Washington, 10 regional offices (annual budget 7.5 billion, 17.000 staff) <i>Director:</i> Lisa Jackson	Government Executive branch Federal level
Department of Energy (DOE)	Responsible for energy issues, that sometimes cross with climate issues, renewables, energy efficiency <i>Secretary:</i> Steven Chu	Government Executive branch Federal level
Department of Agriculture (USDA)	Agriculture, Food, natural resources – renewable energy funding <i>Secretary:</i> Tom Vilsack	Government Executive branch Federal level
Senate 1. Committee on Energy and Natural Resources. Climate related sub-committees: Energy <i>Chairman:</i> Jeff Bingaman, Ron Wyden (D) <i>Ranking Member:</i> Lisa Murkowski (R) 2. Committee on Environment and Public Works. Climate related sub-committees: Clean Air and Nuclear Safety; Green Jobs and the New Economy <i>Chairman:</i> Barbara Boxer (D) <i>Ranking Member:</i> James Inhofe, David Vitter (R)	Important for domestic and international climate policies (two-thirds majority needed for the ratification of legally binding commitments).	Government Legislative branch Federal level

3. Further Committees that influence climate issues: Finance; Agriculture, Nutrition, and Forestry; Foreign Relations; Commerce, Science and Transportation		
House of Representatives 1. Select Committee on Energy Independence and Global Warming. Created 2007 by Nancy Pelosi (D), rather influential concerning the climate debates and legislation in Congress Chairman: Edward Markey (D) 2. Committee on Energy and Commerce. Subcommittee on Energy and Environment Chairman: Henry Waxman	Important particularly for domestic climate policies	Government Legislative branch Federal level
Federal States	Despite the lack of a nationwide climate law, several states have passed fairly progressive climate laws	Government Executive and legislative branch State level
US Supreme Court	Particularly important with regards to a decision concerning the EPA e.g. the regulation of GHGs under the <i>Clean Air Act</i>	Judicative branch Federal level
Non-Governmental Actors		
CNA's Center for Naval Analysis	Think Tank, Center for Naval Analysis is a subsection of the CNA. Consist mainly of former military staff, focus on military and defense issues	NGO Think Tank (Staff)
Center for a New American Security (CNAS)	Think Tank, specialized in US national security issues and defense policies, founded in 2007	NGO Think Tank (Staff)
Center for Strategic and International Studies (CSIS)	Think Tank, bipartisan, independent not-for-profit organization, founded in 1987. Topics: foreign policy, political, economic and security issues	NGO Think Tank (Staff)
Center for American Progress	Think Tank, independent nonpartisan educational institute concerned with 21th-century challenges (energy, national security), public policy research and advocacy, founded in 2003. Project Climate – Migration – Security concerned with intersection of climate change, human migration, and conflict as challenges for US foreign policy	NGO Think Tank (Staff)
Operation Free	Nationwide coalition of veterans and national security organizations that recognize that climate change and energy dependency pose serious threats to US national security, founded in 2009	NGO Veteran Network
RAND Corporation	World's oldest and the United States' largest think tank, RAND is an independent, non-profit, non-partisan research institution. Topics: a range of public policy areas, including environmental protection, climate change, energy and water, and other natural resources, Founded in 1946	NGO Think Tank (Staff)
Wilson Center (Environmental	Think tank, since 1994, the Environmental Change	NGO

Change and Security Program)	and Security Program (ECSP) has explored the connections among environmental, health, and population dynamics and their links to conflict, human insecurity, and foreign policy. Founded 1968, ECPS in 1994	Think Tank (Staff)
Center for Climate and Security	Think Tank, Website, collects material, but has also some research of its own. Founded in 2009	NGO Think Tank (Staff)
American Security Project (ASP)	Non-profit, non-partisan public policy and research organization (think tank). National security issues, promoting debate about the appropriate use of American power, and cultivating strategic responses to 21st century challenges.	NGO Think Tank (Staff)
Strategic Studies Institute of the US Army War College	College of the US Army, research is focused on consequences for the military. Topics: National security and strategic studies	Scientific University/Army
Greenpeace USA	Non-governmental independent campaigning organization, founded 1972, promotes action on a range of environmental topics including climate change	NGO Environmental Organization (Membership)
WWF	Globally working environmental organization, with national subsections, also section about national security which collects reports and occasionally publishes on its own	NGO Environmental Organization (Membership)
Sierra Club	One of the oldest, largest, and most influential grassroots environmental organizations in the US; works with volunteers and activists on campaigns, founded 1892	NGO Environmental Organization (Membership)
Center for Climate and Energy Solutions (C2ES)	Independent, nonpartisan, nonprofit organization, founded in 2011.	NGO Environmental Organization (Staff)
Environmental Defense Fund (EDF)	National nonprofit organization. Topics: Energy efficiency and renewable energies; lower-emission energy policies and laws; carbon neutrality founded 1967	NGO Environmental Organization (Law)
Natural Resources Defense Council (NRDC)	Non-profit, non-partisan environmental advocacy and action group. Topics: global warming, clean energy, energy security, oceans and wildlife, water, sustainability , founded in 1970	NGO Environmental Organization (Law)
Council on Foreign Relations	Independent, nonpartisan membership organization, think tank, founded 1921	NGO Think Tank (Staff)
The George C. Marshall Institute	Politically conservative think tank with a focus on scientific issues and public policy. Founded in 1984	NGO Think Tank (Staff)