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The Securitisation of Climate Change in the United States: The Integration of Climate Threats Into the Security Sector

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1. The Climate Debate in the United States: The Fallen Forerunner

Throughout the international climate negotiations, the United States has behaved as one of the principal laggards for most of the time in terms of committing to legally binding international agreements as well as concerning the reduction of its actual greenhouse gas emissions. This has not changed substantively with the construction of climate change as a security issue since the mid-2000s. Nonetheless, the climate security debate has exerted considerable influence because it has reinvigorated and to a certain extent bridged the polarised political debate between conservatives and liberals and has facilitated extensive planning activities in the security and defence sector, particularly concerning climate adaptation measures. The aim of this paper is to shed some light on the climate security debate in the US; in particular, it looks at the dominant climate security discourses, the main actors and the political consequences of the securitisation of climate change. Yet, to situate this analysis in the broader context, the first part of the paper briefly elaborates on the development of the general climate debate in the country.

Contrary to its behaviour in recent international climate negotiations within the United Nations Framework Convention on Climate Change (UNFCCC), 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 initiatives¹ (Falkner 2005: 585, 590; Harris 2001: 5). This was still the case at the beginning of international climate negotiations in the late 1980s until the mid-1990s (Donner and Faltin 2007: 5) and all three Presidents during this period (the Republicans Ronald Reagan 1981–1989 and George H. W. Bush 1989–1993 and the Democrat Bill Clinton 1993–2001) were fairly open towards environmental issues – although often under pressure from a Congress controlled by the Democrats (Harris 2002: 150; Edwards and Lahsen Forthcoming). Moreover, the American public was becoming increasingly aware of climate change since the summer of 1988 had been one of the hottest in US history and NASA had proclaimed that they had detected a serious greenhouse effect (Leiserowitz 2005: 1435). Thus, at this time the US was highly involved in the early debates and negotiations about global climate change. However, even though President Bush was in general sympathetic to environmental and climate issues, at the UN Conference on Environment and Development 1992 in Rio, the United States opposed a too strict climate convention and in the end contributed

¹ For example, the 1970 founded Environmental Protection Agency (EPA) was a role model for similar institutions in many other countries. Additionally, some US environmental organisations 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 were highly involved and exerted considerable leadership in various international conferences (e.g. Stockholm 1972) and agreements concerning environmental issues such as the whaling practices or the ozone layer regime (Montreal Protocol) (Falkner 2005: 590).

to the creation of the UNFCCC that foresees only voluntary commitments to reduce emissions (Harris 2001: 8).

This rather conservative stance towards the international climate regime changed somewhat with the election of Bill Clinton and his environmentally-friendly Vice-president Albert “Al” Gore, who earlier had published the bestselling book “Earth in Balance” (Harris 2001: 11; Falkner 2005: 592). Environmental issues had already featured prominently during their election campaign and when elected Clinton and Al Gore actively tried to push for progressive environmental regulations at home and abroad. They also installed environmentally sympathetic personnel in important positions such as Timothy Wirth at the State Department, Carole Browner as head of the EPA, and Sherri Goodman as Deputy Undersecretary of Defense for Environmental Security (Harris 2001: 6; Edwards and Lahsen Forthcoming: 31). Moreover, Clinton and especially Al Gore were important proponents of the first environmental and climate security debate that developed during the early and mid-1990s. Concerning the international climate regime, the United States signed and ratified the UNFCCC in 1992 and signed the Kyoto Protocol in 1997. However due to increased opposition in the Senate – see the notorious *Byrd-Hagel Resolution* (The National Center for Public and Policy Research 1997) – the protocol was never ratified and in the year 2001 finally renounced by the Bush administration (Müller 2003: 10).

These developments exemplify the turning political landscape during the end of the 1990s, in which the interest for strong environmental regulation was increasingly fading. Concerning the international level, the roles of previous decades were successfully interchanged with the US now presenting itself as the laggard, whereas most European countries and the EU were striving for the vanguard position (Falkner 2005: 590, 591). This shifting attitude of the US is to a considerable extent linked to a changing domestic environment, particularly in Congress and the business community. Both Congress – especially the traditionally more anti-environmental Republicans (Harris 2001: 20) – and an influential non-governmental lobby particularly from the business community were increasingly rallying against environmental and climate policies, especially concerning international legally binding agreements (Falkner 2005: 590; Leiserowitz 2005: 1435; McCright and Dunlap 2011: 158). Thus, despite the progressive rhetoric and the first environmental security debate, the Clinton administration was not able to overcome domestic opposition and to actually restore US leadership in environmental issues (Falkner 2005: 593).

Under the Republican presidency of George W. Bush (2001-2009), this trend consolidated (Harris 2002: 153) and the influential lobby of climate sceptics² together with strong economic actors further succeeded in almost completely discouraging any strong legislative action at the federal level (Fletcher 2009: 806). Many members of the Bush administration, including the president himself, at various occasions expressed their doubts that there existed a relevant human influence on the climate system and hence saw no pressing need to cut emissions (Barnett 2004). Consequently, regarding the federal level and US commitment at the international level, climate policies remained few, non-binding and the focus was on technical solutions (Donner and Faltin 2007: 5; Yamin and Depledge 2004: 45–48; Eckersley 2007: 315–319). During this time, climate issues in general despite having almost vanished from the agenda of the administration, were progressively becoming a field of political polarisation along party lines, which made it even more complicated to reach federal agreements (McCright and Dunlap 2011: 158–159). During the second term of George W. Bush's Presidency (2005-2009), the attitude towards climate issues changed somewhat. Bush now at least acknowledged anthropologically induced climate change as real (Clarke 2005) and agreed to more – though non-binding – agreements at the international level (Fletcher 2009: 805). Reasons for this more climate friendly environment were increased domestic pressures due to fears of losing economic ground towards the Kyoto countries e.g. concerning green energy technologies or opportunities in connection to the Kyoto flexibility mechanisms (Donner and Faltin 2007: 15; Mildner and Richert 2010: 31). The pressure came from the US American public, the business community and oppositional politicians but also from some states that already took a more climate friendly stance, particularly California (Donner and Faltin 2007: 11–14; C2ES 2012; Mildner and Richert 2010: 30–32). Additionally, the second climate security debate that gradually began to develop from 2003 onwards and had its peak between 2007 and 2009 also helped in drawing attention to climate matters (Mildner and Richert 2010: 12; Brzoska 2012: 172; Fletcher 2009: 808, see the next section). During the end of George W. Bush's second term in 2008 the pressure became so high that he finally announced a concrete target to cut US emissions by 2025 (Bush 2008).

With the election of the Democratic President Barack Obama in 2009 climate issues returned to the top of the political agenda and at least the rhetoric towards climate issues changed completely: „[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”

² Important climate-sceptic think tank actors are for instance: the George C. Marshall Institute, the Competitive Enterprise Institute, the Heritage Foundation, and the Cato Institute (Rosenberg *et al.* 2010: 312).

(Obama 2008). Moreover, the prerequisites for a more comprehensive nationwide US climate legislation were good (Mildner and Richert 2010: 12). Apart from a shift in public opinion³ (towards a recognition of the threat posed by climate change), the trend had changed in the economy as well and in 2007 several companies together with environmental organisations founded the US Climate Action Partnership, calling for emission cuts (USCAP 2013). In addition, the Democrats had gained a majority in both chambers of Congress at that time and Obama appointed several well-known climate experts to important posts in his administration such as Todd Stern as Special Envoy for Climate Change, Carol Browner as head of the White House Office of Energy and Climate Change Policy and Lisa Jackson as head of the EPA (US Department of State 2009; Mildner and Richert 2010: 18).

However, the picture changed again after the spectacularly failed UNFCCC negotiations in Copenhagen in late 2009 and the Democrats' defeat in Senate in the midterm elections in 2010 and later in the House of Representatives (Mildner *et al.* 2012: 3; Leggett and Lattanzio 2009). Moreover, several attempts at federal climate legislation failed in Congress during 2009 and 2010. Thus, the Obama administration stopped pushing for a new all-encompassing climate legislation. Instead, the focus was now on influencing the domestic climate field through regulations of the Environmental Protection Agency (EPA) and the Departments of Transportation (DOT) and Energy (DOE), thereby shortcutting Congress⁴. Yet, governing through these regulations did not go without major criticism from the opposition and was also not applicable to many important climate measures, as for example a national emission trading market or a binding reduction target (Mildner and Richert 2010: 21). Additionally, during the early 2010s the United States saw a renewed oil and gas boom (International Energy Agency (IEA) 2012: 2), which further hindered Obama's original plans of investing more in renewable energies. Finally, the declining interest in climate matter was also mirrored in public opinion and according to a poll of the Pew Research Center in 2012 climate change was considered the least important political issue (Pew Research Center 2012: 1). Nevertheless, the positive examples from the state level, international pressure, domestic advocacy efforts, increased media coverage of domestic natural disasters, and the climate security debate contributed to

³ However, there was still a considerable political divide between Democrats/Liberals and Republicans / Conservatives. Liberals and Democrats were more likely to believe 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).

⁴ Apart from the Republican majority, 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 either. Especially Democratic 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).

keeping climate change on the agenda (C2ES 2012; Scherwitz 2014; Brulle *et al.* 2012). In 2014, a new National Climate Assessment (NCA) highlighted the serious consequences of climate change for the United States itself and the think tank CNA published a widely noticed update to its 2007 report on climate change and security. Moreover, the US struck a bilateral deal with China about mutually reducing their emission by 2025 and 2030 (Taylor and Branigan 2014).

2. The Securitisation of Climate Change

Let us now turn to the actual focus of this paper, the securitisation of climate change in the United States. One can roughly divide the climate security debate in the US into two separate phases: a *first phase* in the 1990s that overlapped with broader debates on environmental security; and a *second phase* starting in the mid-2000s that focused exclusively on climate change. Thus, this section consist of two parts: section 2.1 looks at the early phase and briefly illustrates the most important arguments, actors and outcomes of the climate and environmental security debate. Section 2.2 introduces the second phase and thereafter analyses this period in more detail by emphasising the dominant climate security discourses (3)⁵, the most important actors (4), the legitimised policies (5) and the enabling context that made possible this unique securitisation process in the first place (6). The reasons for focusing on the second phase are that it revolved exclusively around climate change and was more influential than the first one. In addition, it coincided with the global climate security debate that started around 2007 with the publication of influential reports – e.g. by the Intergovernmental Panel on Climate Change (IPCC), the German Advisory Council on Climate Change (WBGU), the CNA – and a first debate in the UNSC.

2.1 The First Debate on Environmental and Climate Security

The beginning of the worldwide climate debates in the political sphere during the late 1980s and early 1990s went hand in hand with a first phase of environmental and climate security argumentations. On the global level it were foremost environmental NGOs such as the US American *Worldwatch Institute*, the *Climate Institute*, and the *Earth Policy Institute* that tried to increase attention for climate change by reframing it as security issue (McNamara and Gibson 2009: 477–478; Oels 2012a: 186; Myers 1995). In the United States, these argumentations overlapped with a broader environmental security debate that was unfolding at that time and

⁵ Although my empirical analysis is much more extensive, due to space restrictions, I can only present a few exemplary quotes in this paper for each discourse.

gained particular strength under the Clinton-Gore administration. On the one hand, the connection that was drawn between the environment and security, which later also included climate change, was facilitated by the end of the cold war which left the US security establishment without a clear enemy and therefore led it to focus on new threats (Harris 2002: 150–151; Floyd 2010: 65, 69, 119). On the other hand, academic debates in Political Science and International Relations increasingly pointed to connections between population growth, environmental problems and conflict that could threaten the national security of states (Homer-Dixon 1994; Kaplan 1994). Thus, political practitioners in the US picked up these arguments either to justify military spending or to advance their environmental agenda (Floyd 2010: 73). During this debate, climate change gradually became one of the most important environmental concerns (Edwards and Lahsen Forthcoming: 15). Active proponents in the climate security debate were climate and social scientists, but also political practitioners, for example the then Democratic Senator Al Gore who was one of the first to use climate security arguments to advance climate measures (Harris 2002: 151; US Senate 1989: S5252). From early on, climate security argumentations appeared frequently in debates in the US Congress as well. In an analysis of Congressional debates (between 1989 and 2014) I found a first peak in the 101st (1989-1990) and 102nd (1991-1992) Congress where members of Congress frequently evoked climate change as an *individual* or *planetary* security threat or risk to argue for the need to establish an international climate regime⁶:

"Potential climate change presents such a serious threat to human well-being throughout the world, that the United States should undertake urgent action to support and encourage negotiations necessary to bring about a framework convention for international cooperation on limiting the emission of greenhouse gases [...]." (US Senate 1990a).

During the 103rd (1993-1994) and 104th (1995-1996) Congress there were fewer climate security debates but those that did connect climate change to security kept arguing on the basis of the individual and planetary discourses, often in a rather cautious and risk-focused way (US House of Representatives 1994: H4984, 1995: H9942). Throughout the 105th (1997-1998) until the 107th Congress (2001-2002), climate security argumentations appeared more frequently, especially in relation to the Kyoto protocol (US House of Representatives 1998a: H3577) and

⁶ Interestingly, they often conflated climate change with the destruction of the Ozone layer at that time and used both threat images in the security argumentation (US Senate 1989: S5252) – a pattern that was also quite common in Germany in the early days of the climate security debate.

again mostly focused on the individual (US House of Representatives 1998b: H6224) and planetary referent object level (US Senate 1999a: S2330) and on the risk dimension (US Senate 1999b: S9744). Interestingly, the territorial level that later became the most important climate security discourse in the US (see section 2.2), appeared only rarely and was never the dominant argumentation in Congress during the first climate security debate.

Although not being the only factor, this first environmental and climate security debate influenced several US policies concerning the international negotiations and domestic climate initiatives. Concerning the domestic level, the first important legislation on climate change in Congress had been adopted in 1987 (Global Climate Protection Act) and among other things provided to increase research on climate matters, advised the EPA to prepare a national climate policy and directed the secretary of state to coordinate international policy. A further far-reaching decision was the establishment of the US Global Change Research Program in 1990 that from then on became one of the most influential research programs on climate change and had approximately 1.5 billion US dollars annually at its disposal. When Democratic President Bill Clinton together with his Vice-President Al Gore, who was dedicated to environmental issues, assumed office in 1993, climate issue began to rank even higher on the agenda and they increased research funding particularly for the socio-economic dimensions of climate change (under which the security effects fall) (Edwards and Lahsen Forthcoming: 20–24). Concerning the international level, under the lead of the Department of State (DOS) – led by a dedicated environmentalist and friend of Al Gore, Timothy E. Wirth – and USAID, the United States helped to establish and signed the UNFCCC in 1993. Moreover, in 1996 at COP 3 Timothy Wirth stated that the US now supported binding emission regulations, which later led to the (preliminary) acceptance of the Kyoto Protocol. As the analysis of parliamentary debates has shown, climate security argumentations played an important role in generating support for these treaties (US Senate 1990a; Edwards and Lahsen Forthcoming: 16–17). Moreover, the US was quite active in organising the international climate movement and in convincing other countries to participate in the climate regime, for example through the *US Country Studies Program* that encouraged developing countries to deal with climate change (Pulver 2006: 3). Even though one cannot attribute these developments concerning domestic and international US climate policy directly or exclusively to the climate security debate, they mirror the high standing climate issues still had in the US at that time, to which the security argumentation has contributed to a considerable extent.

Furthermore, despite the overall focus on the planetary and individual level, the debate had also an impact on US security policy. Although not being an environmentalist, Republican

President Ronald Reagan under pressure by NGOs and a Democratic majority in Congress (Edwards and Lahsen Forthcoming: 19–20), was the first to acknowledge environmental degradation and resource scarcity as important security problems for the US (Harris 2002: 150). His successor Republican George H. Bush for the first time explicitly mentioned climate change in the NSS in 1991, although only as one topic besides many and with a rather low priority (The White House 1991: 2, 22). The first NSS (1994) under the Clinton-Gore administration even depicted climate change as “[...] environmental risk[s] serious enough to jeopardize international stability [...]” (The White House 1994: 15). From that year onwards, climate change and other environmental security issues were treated as “very real” threats for regional and global stability in the security and defence planning of the United States (Harris 2002: 151; Below 2007: 709; Richert 2009: 10). One reason for the high standing of environmental issues and the connections to security under the Clinton administration was that organisations and individuals advocating a connection between the environment and security were closely connected to the government or even part of it themselves (Harris 2002: 154). Al Gore had already been an active proponent of environmental security argumentations in the years before and in addition actors such as Timothy Wirth at the State Department and Sherri Goodman as Deputy Undersecretary of Defense for Environmental Security were strong proponents of an environmental security agenda (Harris 2001: 151). Further practical outcomes of the climate security framing were the establishment of various programmes and initiatives at the intersections between the environment and security (Floyd 2010: 102, 106). Examples are the *Strategic Environmental Research and Development Program* (SERDP), which allowed the use of intelligence capabilities to monitor the environment (DOD 2015; US Senate 1990b: S12406). The establishment of the DOD’s *Office of the Deputy Under Secretary of Defense – Environmental Security* (ODUSD-ES) and the appointment of Sherri Goodman⁷ as its head. This office, which received funding of five billion dollars per annum, was supposed to oversee the environmental impact of the DOD’s activities, dealt with various environmental security topics and cooperated with the EPA (EPA 1994; US Senate 1991). In addition, the US Central Command (CENTCOM) under General Anthony Zinni, also dealt with questions of environmental security and cooperated with the ODUSD-ES.

However, after the heated discussions about the Kyoto protocol in 1997, the climate debate in general and the climate security discourse in particular declined in the US – as we

⁷ At this time, Sherri Goodman, who later became one of the leading actors in the second climate security debate, was working in the DOD and already took a strong interest in environmental security matters (Interview 2014j).

already saw in the Congressional debates. An important reason for this deterioration was a coalition of climate sceptics⁸ that had been building up throughout the 1990s and that aligned with powerful industry interests (especially from the fossil fuel sector) against any binding commitments to tackle climate change and its security-relevant effects (Leiserowitz 2005: 1435; Rosenberg *et al.* 2010: 312; Fletcher 2009: 804–805). Moreover, the planetary and individual climate risk argumentations that had dominated the debate throughout the 1990s mostly portrayed climate change as a rather distant long-term risk that would foremost concern distant places and people; an argumentation that made it increasingly difficult to mobilise greater support from the American public or in political circles (Leiserowitz 2005: 1438–1440).

Especially after the election of George W. Bush in 2001, who had not shown a particular interest in environmental issues in the past, climate issues and even more so climate security arguments ceased to play an important role (Harris 2002: 153). The terror attacks on September 11th 2001 and the ensuing “war on terror” and “Iraq war” eventually led to an almost exclusive focus on these issues within the US security sector leaving no room for “soft” security issues such as climate change (Floyd 2010: 122). Consequently, the two NSS (2002 and 2006) under George W. Bush do not directly connect the environment and climate change to security anymore (The White House 2002, 2006). Accordingly, particularly during Bush’s first term in office, his administration actively reversed the steps the Clinton administration had taken to connect the environment and climate change with security concerns and to protect the environment and the global climate (Harris 2002: 153). This translated into cuts in funding, renaming of institutions, reversing executive orders and the replacement of important personal⁹. Nevertheless, despite these developments on the governmental level, influential nongovernmental actors and politicians from the political opposition continued to worry about climate matters and were ever more dissatisfied with the situation, which eventually contributed to the emergence of the second climate security debate (Harris 2002: 155–156; Interview 2014j).

2.2 The Second Climate-Security Debate

After the first environmental security debate had faded throughout the late 1990s and early 2000s, the first sign of the beginning of the second climate security debate appeared in October

⁸ Also called “climate deniers” or “naysayers” (Leiserowitz 2005).

⁹ For example George W. Bush called for an opening of protected areas for resource exploitation, he took back his previous pledge to cut CO₂ emissions of electricity plants, and he finally withdrew US support of the Kyoto protocol (Harris 2002: 153). He also renamed the ODUSD-ES to ODUSD-I&E (meaning Office of the Deputy Under Secretary of Defense – Installation and Environment) and actors dedicated to environmental issues such as Sherri Goodman left office (Floyd 2010: 128, 142).

2003 with the publication of an originally classified study commissioned by the US Department of Defense (DOD, sometimes also referred to as Pentagon) that was later made public. This report “*An Abrupt Climate Change Scenario and Its Implications for United States National Security*” written by Peter Schwartz and Doug Randall, dealt with the possible implications of climate change on US national security in quite an alarming way (Schwartz and Randall 2003). One of its most radical scenarios (e.g. a discontinuation of the Gulf Stream leading to an ice age in the Northern Hemisphere) later actually appeared in the major Hollywood movie “*The Day After Tomorrow*”. However, despite the disturbing language and drastic scenarios, or maybe even because of them, the report had no greater impact on the climate debate and initially¹⁰ did not lead to a substantial shift in the US approach to climate change (Interview 2014a). A further reason for the limited impact was its publication during Bush’s first term in office as it diametrically contradicted his political stance on climate change. Nonetheless, the study was the first sign of a reinvigorating climate security debate and paved the way for a whole series of think tank publications on climate security that appeared from the year 2007¹¹ onwards. The most influential report came from the *Military Advisory Board (MAB)* of the security-oriented semi-governmental think tank *CNA* (2007). Further influential studies were published by the *Center for Strategic & International Studies (CSIS)*, the *Center for a New American Security CNAS*¹² (Campbell *et al.* 2007), the *Council on Foreign Relations (CFR)* (Busby 2007) and many more (see section 3 and 4). Moreover, there were also some first changes in the institutional structure that foreshadowed a renewed importance of climate security issues, for example the creation of the *Deputy Directorate for Energy and Environmental Security* in the *Office of Intelligence and Counterintelligence* within the *Department of Energy (DOE)*¹³ in 2007. This office was led by Carol Dumaine, who had previously been working for the CIA and had a strong interest in environmental security matters. It was also in 2007 that important actors from the first environmental security debate

¹⁰ Due to the slow pace of democratic procedures, it is difficult to link policies to concrete reports or initiatives. Moreover, even reports that do not lead to any direct changes of the debate can set the agenda or transform the overall climate of the discussion in such a way that they pave the way for subsequent argumentations. Thus, while experts in the field considered this report not very influential, it still might have contributed to establishing the climate security argument as a possible framing.

¹¹ The year 2007 did not only mark the peak of the second climate security debate in the US but also saw a range of think tank and NGO reports on climate security around the world (e.g. the WBGU report in Germany (WBGU 2007)). Moreover, it was in this year that the United Nations Security Council addressed the security implications of climate change for the first time (UNSC 2007a).

¹² The CNAS was co-founded in January 2007 by former CNA president Kurt Campbell.

¹³ Besides the climate security debate, energy security/independence and new economic opportunities connected to a “green economy” were further important framings that often overlapped with the climate security debate (Fletcher 2009: 809–810).

emerged again, above all former Vice-President and Presidential candidate Al Gore. Together with the IPCC he received the Nobel Peace Prize for his commitment to climate matters (especially for his popular documentary “An Inconvenient Truth”) and delivered a highly noticed acceptance speech, in which he clearly tried to securitise climate change using a planetary security argumentation similar to his earlier speeches in the US Senate during the 1990s:

“We, the human species, are confronting a planetary emergency – a threat to the survival of our civilization that is gathering ominous and destructive potential even as we gather here. [...] We must quickly mobilize our civilization with the urgency and resolve that has previously been seen only when nations mobilized for war.” (Gore 2007).

Despite Al Gore’s more planetary security argumentation and contrary to the first climate security debate, the second debate predominantly framed climate change as a territorial security issue. While the individual level also played a role (though mostly to support territorial arguments) the planetary level that used to be very common throughout the 1990s, became much less important. The focus on the territorial level and particularly on climate change as a national security issue tried to transform the image of climate change as distant environmental concern and to break it down to the immediate consequences for the US and its own security. Thus, the climate security argument was actively used by the opposition to put pressure on the Bush administration to bring climate change back 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; Fletcher 2009: 810–811). The peak of this second climate security debate in the US was reached between the end of 2007 and 2010 when most think tanks reports came out and several Congress initiatives were launched (Fletcher 2009: 808; C2ES 2007/2008b; Interview 2014b). The beginning of 2007 is marked by the publication of the 4th assessment report of the IPCC that had been published earlier that year and also included some parts on security-related impacts of climate change (IPCC 2007). Moreover, at that time the international climate negotiations in general received considerable attention because important breakthroughs had been reached at the COP 13 in Bali (Becker 2007) and it was expected that the negotiations at COP 15 in Copenhagen in 2009 would lead to a new all-encompassing climate agreement.

After several political setbacks at the international and domestic level however, from 2010 on, the climate security argument gradually wore out and the funding for climate reports

decreased (Interview 2014d, 2014c). Yet, the debate never disappeared completely and has continued to exert influence until 2014 when the influential 3rd National Climate Assessment (Melillo *et al.* 2014) came out and CNA delivered a much-noticed update to its 2007 report (CNA Military Advisory Board 2014). The climate security debate has also influenced a whole series of political discussions, programmes, policies and planning schemes, which I will discuss in more detail in the next paragraphs.

3. Dominant Securitisation Discourses

Looking at the second US climate security debate, the most frequent argumentations fall into the security rather than the risk dimension and look at the territorial level as main referent object. Thus, the dominant discourse is the *territorial security discourse*, thereby clearly setting this phase apart from the first one in the 1990s. All 25 relevant reports on climate security that I analysed (mostly think tank reports) mention this discourse and in 18 it is the dominant one. The most common argumentation presents US national security as threatened by the direct physical and indirect socio-economic and political effects of climate change, as this quote exemplifies: “Projected climate change poses a serious threat to America’s national security. [...] These conditions have the potential to disrupt our way of life and to force changes in the way we keep ourselves safe and secure” (CNA 2007: 6; see also Rogers and Gullede 2010: 7). Climate change is depicted as a “threat multiplier” (CNA 2007: 6) that could worsen problems in all kinds of sectors and eventually even lead to nuclear war (Campbell *et al.* 2007: 78). The most common *threats* that are projected in these reports are the following: *Firstly*, socio-economic and political problems such as instability and conflict exacerbated by climate change in already fragile countries around the world (mostly in Africa) (CNA 2007: 13, 20; Rogers and Gullede 2010: 16). These threats could create further instability, could endanger current US military operations, necessitate new interventions (McGrady *et al.* 2010: 3) or even lead to the spread of terrorist ideologies (CNA 2007: 13, 17, 31). *Secondly*, direct climatic threats to US military installations and training procedures (e.g. sea level rise, hurricanes, extreme heatwaves) as well as to US combat operations (e.g. extreme weather) (Carmen *et al.* 2010: 1; Foley 2012). *Finally*, the reports mention mass-migration in third countries and towards the United States that could lead to conflict and destabilisation (CNA 2007: 18; Werz and Manlove 2009: 1–3; Werz and Conley 2012: 1; Campbell *et al.* 2007: 9). The threatened *referent object* within this discourse is mostly the United States or its military (Carmen *et al.* 2010: 1), and sometimes the national security of other states (CNA 2007: 3–4).

Besides the territorial level, the *individual security discourse* is the second most common and just about all reports include it into their argumentation. Often the reports contain a discussion of the academic debate on “new security threats” and try to acknowledge broader conceptions of security: “Environmental threats blur traditional notion of national security: secure states do not automatically mean secure peoples and climate change is proving that” (Foley and Holland 2012a: 1). In line with the phrase that the “poor will be hit first and hardest”, the main *threats* that the reports mention within this individual security argumentation are on the one hand, direct physical climatic effects for people living in developing countries such as extreme weather events, droughts, famines and disease (Albright *et al.* 2006: 7; Campbell *et al.* 2007: 56; Busby 2007: 9). On the other hand, especially in recent years, the reports also focus on endangered individuals in the United States itself with a focus on increased frequency and intensity of storms and hurricanes (CNA Military Advisory Board 2014: 27; Foley and Holland 2012b: 33, 43). To exemplify this point, they often refer to devastating storms such as Katrina (2005) and Sandy (2012): “However, Hurricane Katrina demonstrated all too well the possibility that an extreme weather event could kill and endanger large numbers of people, cause civil disorder, and damage critical infrastructure in other parts of the country” (Busby 2007: 5). This strategy to highlight the domestic effects of climate change had already been used by the media and politicians to increase the direct problem awareness among the US American public (Interview 2014j). Despite the fact that many reports include the individual security discourse, they usually mention individual security arguments not in an isolated fashion but link them directly to territorial security claims. Hence, the individual security discourse is normally only part of an argumentative chain that in the end focuses on territorial security considerations:

“A health emergency involving large numbers of casualties and deaths from disease can quickly expand into a major regional *or global security* challenge that may require military support, ranging from distribution of vaccines to full-scale stability operations” (CNA 2007: 15, our emphasis).

The *planetary referent object level* that used to be quite popular throughout the first climate security debate no longer features prominently and only nine of the 25 reports include it at all. It is never the core narrative of the reports and is mostly only mentioned supporting argument for other discourses, for example the individual security discourse: “Coastal hurricanes and sea-level rise are threats to coastal communities and ecosystems” (Foley and

Holland 2012b: 43). Thus, in comparison to the debates in the 1990s, this indicates an important shift in the overall climate security argumentation. This shift is connected to the more strategic framing of the second climate security debate that is supposed to clearly emancipate itself from the environmentalist discourse of the past which was deemed ineffective (Interview 2014j).

Contrary to what one could expect based on some of the secondary literature on critical security studies that diagnosed a growing importance of indirect risk conceptions (Corry 2012; Aradau and van Munster 2007; Dillon and Lobo-Guerrero 2008; Hameiri and Jones 2013), in the US climate security debate the *risk dimension* is less common than the security one. Although climate risk discourses do exist in many of the analysed reports (mostly concerning the territorial level), they often play only a supporting role. By pointing to the low probability but potentially catastrophic impact of climate risks, they effectively make a security-based argument:

“Adm. Bowman concludes that regardless of the probability of the occurrence, the projected weather-driven global events could be dire and could adversely affect our national security and military options significantly. He therefore argues that the prudent course is to begin planning, as we have in submarine operations, to develop a similar defense in depth hat would reduce national security risks even if this is a low probability event, given the potential magnitude of the consequences.” (CNA 2007: 41).

Nonetheless, risk vocabulary is quite common in the reports especially in connection to military actors and military planning. Concepts such as “risk management” (CNA 2007: 10), “black swan events¹⁴ (CNA and Oxfam 2011: 13)” and “contingency planning” (Carmen *et al.* 2010: 3) appear on a regular basis. A common argument is that the military is much better equipped to handle the long-term risks of climate change because its planning intervals are longer than those of the political actors (Campbell *et al.* 2007: 14). Moreover, it is used to planning with incomplete risk-based information, as this quote by General Gordon R. Sullivan, who participated in CNA’s 2007 report, exemplifies: “If you wait until you have 100 percent certainty, something bad is going to happen on the battlefield.” (CNA 2007: 10).¹⁵ Nevertheless, the predominant logic of the second climate security debate always remained security-focused

¹⁴ Future events that have a very low likelihood of occurrence but possibly could entail devastating consequences, e.g. climate tipping points such as the end of the Gulf Stream circulation or major terrorist attacks.

¹⁵ This quote was later also directly mentioned in Congressional debates on climate change (US Senate 2008c: S5191).

and operated even more with concrete threat scenarios than in the past (Interview 2014a). In a sense, the security discourses incorporated some concepts from risk management (which often appear in climate science reports) without completely changing their core narrative – a process which some have termed “climatization” (see section 5) (Oels 2012a).

The main *countermeasures* that the analysed reports proposed in connection to these dominant argumentations are the following. On the one hand, most reports include classical mitigation measures such as cutting emissions, increasing energy efficiency, emission trading schemes and multilateral cooperation (Campbell *et al.* 2007: 19, 89, 109; CNA 2007: 23, 45-46); and in connection urge the US Congress to appropriate more money to climate research programs and to develop climate legislation (Busby 2007: 17–18). On the other hand however, the focus of many reports is on adapting to the security effects of climate change and on increasing the resilience of the US and its military towards climate change (CNA 2007: 46). Consequently, they often directly address the DOD (Rogers and Gullledge 2010: 9), the intelligence sector (CNA 2007: 23, 45) and the Armed Forces (Carmen *et al.* 2010). This is not surprising, given the fact that most reports focus on threats to US national security and to the US military itself, for which the immediate solution is not long-term mitigation but short-term adaptation. Thus, most reports recommend integrating climate threats into the planning schemes of the security, military and intelligence sector, above all into the Quadrennial Defense Review (QDR) and into the National Intelligence Estimates (NIE) (CNA 2007: 46; Carmen *et al.* 2010: 6). More concretely, they call for all-encompassing institutional reforms in those sectors to develop new military capabilities that match the proposed dangers of climate change (CNA 2007: 20, 29, 39). That entails also adjusting military bases, providing new climate-resilient equipment and enhancing training for interventions in crisis regions around the world where the situation could worsen due to climate change (McGrady *et al.* 2010: 35; Campbell *et al.* 2007: 108; CNA 2007: 16, 25, 40). Besides these recommendations concerning the security sector alone, by connecting territorial and individual climate security discourses, the reports also recommend better cooperation between military, civilian and development as well as climate actors (e.g. USAID) (CNA 2007: 45; CNA and Oxfam 2011: 3; Carmen *et al.* 2010: 12; Werz and Manlove 2009: 5): “The presence of armed conflict may make disaster response or humanitarian assistance operations more complex, requiring military or other forces to stabilize the situation before aid can be delivered” (McGrady *et al.* 2010: 3). Moreover, several reports call for a much closer cooperation between climate science and the defence sector and for instance urge to invest “in a community of climate-security translators” (Rogers and Gullledge 2010: 11). Finally, due to an increasing focus on the domestic effects of climate

change in the US¹⁶, some of the reports also recommend improving the disaster management capabilities in the US and especially address the *Department of Homeland Security* (DHS) and the *Federal Emergency Management Agency* (FEMA) (Werz and Conley 2012: 9-10, 35; CNA 2007: 7; Foley and Holland 2012b). Section 4.2.3 will elaborate in more detail on the actual consequences of the territorial security oriented securitisation for the broader political landscape and handling of climate change.

4. Main Actors

The dominance of the territorial security discourse in the recent US climate security debate is closely linked to the main actors and their motives. One remarkable finding is that it were foremost security-oriented think tanks and not, as one could also have expected, environmental NGOs, that most actively pursued climate security arguments. These think tanks are much more common and influential in the US political debate than in other comparable countries. There are several reasons for their importance: *firstly*, the think tanks often employ experienced and high-ranking former political or military personnel, who work there after leaving government or service. Moreover, it is very common to switch between think tanks and government positions, so people bring their political networks and influence into these think tanks. Hence, the senior staff usually has very good connections to political and military circles and propagates the think tank's position to important multipliers. *Secondly*, because of the heavy workload of the active political personnel in the administration, parliament and government departments, they often do not have the time to develop policy concepts that cover problems that lie in the more distant future, such as climate change (Interview 2014j). Thus, the think tanks provide the "thinking" and often even ready-to-use talking points and policy drafts for governmental actors (Interview 2014a, 2014i). *Thirdly*, the think tanks with their good connections to the media and other non-governmental actors can provide cover and backup for government actors who go public with a new and possibly provocative argumentation such as climate change as a national security issue (Interview 2014i).

The starting point for taking up the climate security argument by these think tanks was the gridlock of the general debate on climate change during the Presidency of George W. Bush. During his presidency, influential proponents of a more active US commitment in climate

¹⁶ On the one hand, this shift in focus can be attributed to several severe storms that hit the US between 2005 and 2012 and that the media and the public increasingly connected to climate change. On the other hand, it was also a strategic choice as it had become clear that the US American public attributed only limited severity to a problem that only lied in the distant future and would hit distant places around the world (Leiserowitz 2005: 1437; Interview 2014j).

matters were increasingly dissatisfied with the stalemate and the seemingly unbridgeable divide between Democrats or liberals on the one side and Republicans and conservatives on the other (Interview 2014j, 2014a, 2014d). Various experienced individuals who had in part already participated in the first environmental security debate in the 1990s and who had useful connections to political and military circles such as Sherri Goodman¹⁷, Kurt Campbell¹⁸ and Geoffrey D. Dabelko¹⁹ saw the need for a reframing of climate change (Interview 2014j). They realised that melting glaciers, starving polar bears and climatic effects in distant places would not convince broader parts of the public²⁰ and the political establishment of the importance of climate change and robust counter-measures. At the same time, they felt that climate change could actually affect the US militaries' capacities and its interests at home and abroad. This realisation coincided with observations of the US Navy itself that sea levels were rising and environmental conditions had changed dramatically especially in the arctic in recent times (Interview 2014h; US Navy 2009). A further important factor in enabling these reports was increased funding by several influential foundations such as the Energy Foundation, the Rockefeller Foundation, The Skoll Global Threats Fund and the Carnegie Foundation, who at that time also saw the chance to reframe the climate debate using security arguments (Interview 2014j).

Not working in Government at that time, these individuals agreed to approach the issue through assembling high-ranking retired military officers and various security-oriented think tanks to talk and write about the connections between climate change and security (Interview 2014j, 2014d). Getting the military or at least retired military officers to talk about climate change was immensely important to underscore the significance of the climate problem and its security risks due to the military's exceptionally good reputation in broad parts of the US public

¹⁷ Having served as the Deputy Undersecretary of Defense for Environmental Security at the DOD from 1993-2001, Sherri Goodman had herself experienced and shaped the first environmental security debate and thus already had a great deal of experience in environmental security matters when she came to work for the CNA in 2001. Later she became Executive Director and Senior Vice President of the CNA and is also a member of the CFR. In addition, she has testified before Congress several times on climate change and security matters (Goodman 2014).

¹⁸ Kurt Campbell served in the Navy and in several security related government positions in the past, and has been one of the most influential individuals in the climate security debate. He has worked for several of the most relevant think tanks in the debate (CNAS, CFR and CSIS) and co-founded the CNAS himself in 2007. He is also one of the lead authors of the CSIS/CNAS 2007 report on climate security.

¹⁹ Geoffrey Dabelko is currently professor and Director of Environmental Studies at the George V. Voinovich School of Leadership and Public Affairs at Ohio University. He is also affiliated with the Woodrow Wilson Environmental Change and Security Program and over the last two decades has worked on the connections between the environment, population, development, conflict, and security.

²⁰ A 2005 article on the risk perceptions of the American public discovered that although the majority viewed climate change as a risk, the predominant image was that of environmental problems in distant places that did not directly affect the United States or its inhabitants (Leiserowitz 2005: 1440).

(Gallup 2014) and in political circles (Interview 2014j; US Senate 2007: S13502). The public and most politicians perceive it as a politically neutral and pragmatic actor who only approaches the real problems and is not caught up in political and ideological turf wars that at that time dominated the climate debate in Congress. By engaging the military, the hope was to convince conservative and Republican audiences who are traditionally much more open to national security arguments and military actors (Fletcher 2009: 808) and at the same time to objectify the debate: “Since climate change is a national security concern, trusted members of the security policy community, especially the military, can act to tilt policy discussions toward evidence-based conclusions” (Rogers and Gullledge 2010: 22). Moreover, parts of the military, particularly the Navy, also had an interest in highlighting the security implications of climate change. They had already experienced its effects (e.g. melting ice shelves in the Arctic or increased hurricane intensity in East Asia) and were often the first to act in humanitarian missions after extreme weather events around the world. Thus, they were deeply concerned that unchecked climate change could in the future increase their workload even further (Interview 2014i; US Navy 2010: 5).

The most important actor in the climate security debate was the semi-governmental think tank CNA²¹ that specialises in security and defence issues and has a long history of working for the DOD and military forces, especially the US Navy. Starting around 2006, Sherri Goodman (as Senior Vice President of the CNA and later Executive Director) assembled a “Military Advisory Board” (MAB) for the CNA that consisted of several high-ranking retired military officers (e.g. the former CENTCOM commander General Zinni). Sherri Goodman had already been active in the earlier environmental security debates when she had been working at the DOD and still had good personal relationships with people in the defence sector and in the military (Interview 2014d, 2014j). In 2007 the MAB published the to date most influential report²² on climate security “National Security and the Threat of Climate Change” (2007)²³, partly funded by the Rockefeller Foundation (Interview 2014d). The aims of the report were to raise awareness for climate change in general, for the connection between climate change and security in particular, and to improve security policy by integrating climate security into military and intelligence planning, especially into the Quadrennial Defense Review (QDR) and

²¹ Former names were „CNA Corporation“ and „CNAs Center of Naval Analysis“.

²² In political as well as in academic discussions, this report is widely regarded as one of the most influential and most cited worldwide (see for example: Hartmann 2010; Brzoska 2009; Detraz and Betsill 2009).

²³ Between 2007 and 2012, the CNA published further reports on climate security and energy security (CNA and Oxfam 2011; McGrady *et al.* 2010). In 2014 the MAB published an equally well-noticed update to this report, mainly funded by the Energy Foundation (CNA Military Advisory Board 2014). The timing of these reports was linked to the 5th IPCC report and the US National Climate Assessment, which both came out in the same year.

into the Intelligence Estimates (Interview 2014d). In the same year, the two think tanks *Center for Strategic & International Studies (CSIS)* and *Center for a New American Security (CNAS)* under the lead of Kurt Campbell²⁴ together delivered another well-noticed report “The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change” (Campbell *et al.* 2007). These two reports paved the way for a whole series of further reports and projects at the intersection between climate change and security, especially between 2007 and 2012. Important actors in this regard were foremost security-oriented think tanks or projects such as the *Center for American Progress (CAP)* (Werz and Conley 2012), the *American Security Project (ASP)*²⁵ (American Security Project (ASP) 2012), the *Center for Climate Change Energy and Security (C2ES)*, former “Pew Center on Global Climate Change” (Huebert *et al.* 2012), the *Operation Free of the Truman Group*, and the *Council on Foreign Relations (CFR)* (Busby 2007). In addition, more broadly-oriented think tanks at the intersection between academic and policy oriented research such as the *Brookings Foundation* (Mignone 2007), the *Woodrow Wilson Center* (Woodrow Wilson Center 2009) and *RAND* (Treverton *et al.* 2012) also participated in the debate, though with a less security-oriented framing. In general, one has to make an important distinction between two types of think tanks: Firstly, non-partisan think tanks such as CNA, CSIS, CCS, CFR, Brookings, Wilson Center and RAND that are widely respected by all political parties and are citable for government actors. Secondly, more partisan-oriented think tanks such as *CAP*, *The Operation Free* and the *Center for the National Interest* that are closer to the Democrats and that naturally encountered some scepticism from the political opponents and cannot be cited by government organisations (Interview 2014n). Finally, the climate security debate also drew the attention of outright climate-sceptical organisations such as the George C. Marshall Institute, which questioned the relationship between climate change and security and accused the other think tanks of using the security argumentation for partisan politics (Kueter 2012). However, the climate (security) sceptics remained a minority in the climate security debate, as most think tanks were strongly in favour of the climate security argument.

In 2010, the debate was further institutionalised with the foundation of the *Center for Climate & Security (CCS)* by Francesco Femia and Caitlin E. Werrell (Interview 2014b). The CCS acted as a research hub that collected all reports and government policies and documents on the climate security nexus (CCS 2015). Moreover, it became the most important convener

²⁴ Kurt Campbell knew Sherri Goodman personally. In the past, he had worked for CSIS and then co-founded the CNAS in 2007.

²⁵ Interestingly, the ASP was co-founded by John Kerry who would later, as secretary of state in the Obama administration, often connect climate change to security concerns (see section 5).

between the different think tanks and governmental actors working on climate security and organised informal periodic meetings between people working on these issues. Moreover, the centre directly drafted reports and policies for members of Congress (Interview 2014a, 2014i). The formerly good relations between most involved think tanks deteriorated somewhat after several initiatives in Congress for federal climate legislation had failed in 2010 and the interest in climate matters declined among the public. Thus, accumulating funds became more difficult, which led to more competition between the think tanks²⁶ and a decline in the importance of the climate security debate in general (Interview 2014d).

Interestingly, environmental organisations such as *Greenpeace*, *The Nature Conservancy* or *WWF* as well as human rights groups or church organisations did not participate prominently in the US climate security debate. This is quite an extraordinary finding as they have played a much greater role in other countries – for example in Germany or in the UK (Christian Aid 2007; Germanwatch 2013) – and linking climate change to security to raise political attention has been a popular strategy by these organisations. Yet, in the US case after informal agreements with the security think tanks these organisations deliberately kept away from the climate security debate to avoid hurting the argument with their liberal and environmental image (Interview 2014f, 2014a). Lacking expertise in security-related and military matters their participation would most likely have been perceived as sheer “branding” of environmental issues with security considerations and would have damaged the credibility of the involved think tanks (Interview 2014a, 2014e). Something that happened in Congress were several attempts for legislation eventually failed, inter alia because they did not link climate change and security in a credible way (Interview 2014i; see also the following section 5).

A further striking peculiarity of the US case was the absence of climate and social scientists or research institutions in the official climate security debate²⁷. This is quite remarkable considering the high level of funding and worldwide impact of US academia especially concerning climate research. Thus, there are numerous publications on the issue and there is by now an overwhelming consensus that climate change is happening and does indeed present a major problem (Rosenberg *et al.* 2010) and most think tank reports included these findings into their reports. Regardless of this fact, scientist or research institutions did not

²⁶ For example, there used to be close cooperation between CNA and ASP, besides other reasons because Lee Gunn was President of both organisations. However, after both competed for the same funding (which CNA won in the end), relations deteriorated (Interview 2014d).

²⁷ Which again is especially striking in comparison to other countries where research institutions and scientific actors played a much more influential role, for instance in Germany the *WBGU* (WBGU 2007) and the *Potsdam Institute for Climate Impact Research* (PIK) (PIK 2013, 2012).

directly participate in the second climate security debate²⁸ or at least could not generate much attention for their position. There are several interconnected reasons for this finding. Firstly, due to the strong position and very good interconnectedness of the think tanks, they could directly influence political debates and even policies so that there was not much room left for often more nuanced but less catchy scientific findings. Thus, the think tanks acted as intermediary between science and politics and in a way translated complicated scientific findings into the political language by breaking them down to concrete policy recommendations that are much easier to integrate for political actors. Secondly, the absence of scientific actors is connected to the polarised political debate on climate change between liberals and conservatives in the US because conservative politicians and their constituency are much less likely to believe in scientific findings concerning climate change (McCright and Dunlap 2011). The often-used rhetoric argument of Republican politicians in relation to climate change that “they are not scientists” (Atkin 2014) and thus cannot judge whether climate change is real or not, exemplifies this overall anti-scientific sentiment. Moreover, especially amongst conservatives climate science had lost even more credibility because an old Democratic bogeyman – Al Gore – and many environmental actors had extensively argued with scientific findings (Edwards and Lahsen Forthcoming: 19). Thus, climate science was largely associated with naïve environmentalist framings of climate change that the climate security debate was supposed to overcome to convince conservative people.

Because of these problems of a scientific and environmentalist framing of climate change, the security think tanks that dominated the second climate security debate deliberately used a different more national security oriented framing. Moreover, their motivation and the core narrative of the prevailing climate security discourse was not only to influence actual climate measures but to improve security and defence policy (Parthermore and Rogers 2010; Interview 2014g). Because of this unique climate security debate in the US, the resulting concrete policies also focus heavily on the security, defence and military sector. The downside of this territorial security discourse is that it to a considerable extent excludes traditional environmental groups and ideas as well as climate scientists from the discussion and thus decisively limits the probable political outcomes (see also Fletcher 2009: 811–812 on this point).

²⁸ There are of course some exceptions to this claim. For instance, the National Climate Assessments by the US Global Change Research Program (Melillo *et al.* 2014) received widespread attention and was cited in relation to climate security argumentation. Nonetheless, the mentioned think tanks and military actors dominated the political climate security debate.

5. Discourse Resonance and Legitimised Policies

In this section, I turn to the question of whether the securitisation of climate change has been successful in terms of legitimising and facilitating political consequences in the United States that without the climate security framing would probably not have been possible. To begin with, neither did it directly lead to a successful all-encompassing federal climate legislation, nor did it reverse the position of the US in the international climate negotiations. However, it did exert considerable influence elsewhere; thus, altogether I classify it as successful. In general, to loosely quote one of the interviewed think tank experts in Washington D.C.: “The climate security debate has not scored a goal but has moved the ball a bit across the field” (Interview 2014d). Thus, the climate security debate had several indirect and direct effects on the handling of climate change in the US. *Firstly*, it bridged the divide between Republicans/Conservatives and Democrats/Liberals on the issue to a certain extent and provided a platform from which politicians (especially from the centrist, conservative and Republican spectrum) could once more speak about climate change without having to fear their constituents or being labelled as environmentalist. In a sense, the security framing and the support for it by a range of respected think tanks and military leaders provided politicians with a cover to talk about an otherwise not very popular issue (Interview 2014i; Fletcher 2009: 808, 811; Below 2007: 710; McCright and Dunlap 2011: 155; Eckersley 2007: 320). *Secondly*, it increased attention for climate change amongst politicians and the public by elevating it into the realm of high politics and thus contributed to more attempts for climate legislation (see Fletcher 2009: 808; Eckersley 2007: 320). Although there has to date not been any federal legislation, several states have adopted progressive climate laws and in addition increased awareness of the issue made compliance with climate regulations issued by the EPA and the administration more likely²⁹ (Interview 2014j; Brulle *et al.* 2012). *Thirdly*, and most importantly, it directly influenced concrete policies and planning schemes particularly in the security, defence and intelligence sector (Interview 2014k, 2014h; see also Oels and Lucke 2015; Oels 2012b).

Before we go into the concrete consequences in the security sector, let us look at the resonance of the second climate security debate in Congress. Since the second term of George W. Bush as President, general climate initiatives in Congress had steadily grown with only 75 between 2001 and 2002 rising to 106 between 2005 and 2006. Especially after the Republicans had lost their majority in Congress in 2006, the number of climate initiatives began to increase (Donner and Falin 2007: 9) to 235 in the 110th congress between 2007 and

²⁹ President Obama had been using EPA regulations and executive orders to circumvent the divided Congress since all major attempts for climate legislation had failed in Congress in 2010.

2008 (C2ES 2008). This increase was also true for climate security-focused argumentations. Between 2003 (108th Congress) and 2006 (109th Congress), climate security argumentations had slowly picked up again compared to the late 1990s and early 2000s. At this time, it were still mostly planetary and individual risk argumentations that were occasionally used in debates on climate change:

“Ms. Snowe: The risks associated with a temperature increase above two degrees centigrade are grave, including the disintegration of the Greenland ice sheet, which, if it were to melt completely, would raise global average sea level by approximately 23 feet, devastating many of the world’s coastal areas and population centers” (US Senate 2006: S10663).

This picture changed completely with the 110th Congress (2007-2008) that coincides exactly with the peak of the climate security debate mostly orchestrated by the mentioned think tank actors. From then on the frequency and intensity of Congressional debates mentioning climate security arguments increased considerably and the core narrative changed entirely. Members of Congress now predominantly framed climate change as a territorial security issue that threatened the national security of the United States and its military:

“In addition to these indirect risks to national security, there are also direct impacts on U.S. military systems, infrastructure and operations. Climate change will add stress to our weapons system, threaten U.S. bases throughout the world, and have a direct effect on military readiness” (US Senate 2008a: S4885).

Members of Congress at several points mentioned the two most influential think tank reports on climate security by CNA (2007) and CSIS/CNAS (Campbell *et al.* 2007)³⁰ and even directly quoted from these reports, which underscores their importance for the transformation of the dominant framing:

Mrs. Dole speaking: “Additionally, last year 11 retired three-star and four-star admirals and generals issued a report, National Security and the Threat of Climate Change. They had four primary findings: (1) Projected climate change poses a serious threat to America’s national security; (2) Climate change acts as a threat multiplier for instability in some of the most

³⁰ They also mentioned at one point the Operation Free of the Truman Group (US House of Representatives 2009: H8480).

volatile regions of the world; (3) Projected climate change will add to tensions even in stable regions of the world; and (4) Climate change, national security and energy dependence are a related set of global challenges.“ (US Senate 2008b: S4989).

There are several further examples where political actors in Congress adopted key phrases and concepts, which think tanks had coined, such as “climate change as national security threat” (US Senate 2008a: S4868; CNA 2007: 6), “the spread of terrorism and failed states due to climate change” (US Senate 2008a: S4885; CNA 2007: 1), and that “we can’t wait for 100% certainty (US Senate 2008c: S5191; CNA 2007: 10). Furthermore, “climate change as threat multiplier” (US Senate 2007: S13502; CNA 2007: 1), and that “we are now in the age of consequences regarding the foreign policy and national security implications of global climate change.” (US Senate 2008b: S4990; Campbell *et al.* 2007: 5). Several think tank experts (for example Sherri Goodman) testifying before Congressional committees further reinforced the adoption of think tank concepts and terminology by political actors (Goodman 2014). Likewise, in the Congressional debates it became apparent that the fact that the classification of climate change as national security issue came from retired military personnel (i.e. people who know a thing about security) and not from environment-friendly politicians or activists³¹, greatly increased its credibility: “This is not from Barbara Boxer. This isn’t from Al Gore. [...]. This is from our own retired admirals and generals: Projected global warming poses a serious threat to America’s national security” (US Senate 2007: S13502). Framing climate change as a security issue alone already amplified the attention but precisely the fact that it came from the trustworthy and politically neutral military enormously increased the credibility of this framing (Interview 2014j).

Between 2007 and 2010, various attempts to adopt climate legislation (mostly coming from Democrats and moderate Republicans) tried to take advantage of the predominant climate security framing to increase attention and support (C2ES 2007/2008a; US Senate 2008b: S4990) as this quote exemplifies: “I understand this bill is viewed by most as an environmental bill—which it is – but it is also essential to our national security.” (US Senate 2008b: S4989). In 2007, the *Global Warming Pollution Reduction Act* and the following *Liebermann-Warner Climate Security Act* (Richert 2009: 7) marked important attempts to place climate change on the political agenda. These often bipartisan approaches show that the

³¹ For example Al Gore as a famous and very active environmentalist (however without a strong security background) almost entirely lost his credibility because of his dramatic remarks on climate change (Interview 2014d).

framing of climate change as a security issue might have helped to overcome the sometimes quite ideological divide between Democrats as climate change “believers” and Republicans as “sceptics” (Fletcher 2009: 807). Yet, despite the higher frequency of attempts for federal climate legislation at that time, eventually no initiative was able to pass both chambers of Congress (C2ES 2007/2008b). Important reasons for this failure were firstly, the still considerably strong opposition to binding climate commitments in large parts of both parties.³² This widespread resistance to a considerable extent rests on the specific opportunity structure in Congress where Congressman must primarily answer to their local constituency and therefore are less bound to the overall party line. Hence, Senators from states with a strong focus on the coal, oil, gas and manufacturing sector (e.g. from Southern or Midwestern “rustbelt” states) often opposed climate action no matter if they were Democrat or Republican (Interview 2014i; Mildner and Richert 2010: 26). In addition, in 2010 the Democrats – who, despite the just explained importance of the local level, in general are more sympathetic to climate legislation (McCright and Dunlap 2011) – lost their majority in the Senate³³. The second important reason for the failure of these attempts was that many of these policies were only “labelled” as concerning security aspects and in fact had little to do with security whatsoever. Not coming directly from the correct “sender” (i.e. people with security knowledge such as the military or security think tanks), they were regarded as cheap political tricks using the security label to generate attention and were eventually not taken seriously (Interview 2014i). Most importantly however, the prevailing territorial climate security discourse did not target climate laws and regulations in the first place but rather focused on the security, military and intelligence sector.

Thus, as we have seen many debates in Congress particularly address the implications of climate change for the defence and intelligence sector and urge the corresponding institutions to include the national security risks induced by climate change into their planning (US Senate 2008a: S4885). This argumentation directly correlates with the claims of many of the analysed think tank reports. In their recommendations most reports – besides general demands for better US climate policies (Campbell *et al.* 2007: 108), more mitigation (Busby 2007: 19) and

³² Further important reasons were the rise of the Republican Tea Party movement, which was opposed to any form of bigger government programmes (Interview 2014i), and the economic crisis that had started in 2008.

³³ After the failure to adopt a federal climate legislation, the security debate decreased in Congress in general. While 111th and 112th Congress (2009-2010 and 2011-2012) still saw a quite intense and frequent climate security debate, in the 113th Congress (2013-2014) climate security argumentations were less frequent. This decrease overlaps with the lower intensity of the debate in think tank circles.

international cooperation of the US (CNA 2007: 47)³⁴ – particularly address the DOD and the armed forces and urge them to include climate change into their planning schemes (Campbell *et al.* 2007: 20; CNA 2007: 46; Parthermore and Rogers 2010). Thus, successful and concrete political consequences can be found especially in these sectors (on this finding see also Fletcher 2009: 808; Hartmann 2010: 240; Oels 2012a). In a first attempt in 2007, the *Global Climate Change Security Oversight Act* urged the DOD to foster research into and readiness for possible military consequences of climate change but was not enacted after all. Eventually, the *National Defense Authorization Act 2008*³⁵ succeeded with a similar attempt and obligated the DOD to integrate climate change into the *Quadrennial Defense Review* (C2ES 2008); see also Hartmann 2009 on the issue). As a consequence, climate change now appeared as an important security issue in the QDR 2010 (DOD 2010: 84) and later also in the QDR 2014 (DOD 2014b: 8, 25). The QDR is the most important and influential publicly available planning document and specifies the strategic alignment and military doctrine of the DOD and the Armed Forces. Consequently, the integration of climate change into the QDR has resulted in changes in a whole range of defence and security documents. Since 2008, climate change has already appeared in the National Defense and Military Strategies (DOD 2008: 5), and later the DOD published two Climate Adaptation Roadmaps, one in 2012 (DOD 2012) and a second one in 2014, in which it called climate change a “threat multiplier” and “immediate risk[s] to national security” (DOD 2014a: foreword, 1). Additionally, it integrated climate scenarios into its “Science, Infrastructure, Research, Development & Acquisition Plan” and into the “Strategic Sustainability Performance Plan 2014” (DOD 2014c). Finally, the United States’ Central Command (USCENTCOM) also integrated climate change into one of its regional risk assessments (DOD 2014d). Besides the DOD itself, the Navy was most active on climate change amongst the US armed forces and in 2009 founded a “Task Force on Climate Change” (US Navy 2009) and in 2010 published a Climate Roadmap (US Navy 2010). Furthermore, as recommended by think tank reports on climate security (Werz and Manlove 2009: 4–5), the DOD increased its cooperation with civilian and development actors such as the DHS and USAID (Hartmann 2010). Thus, this facilitated a further merging of defence and civilian approaches and concepts such as “networked security”, “integrated power”, and “sustainable security” (Werz and Manlove 2009: 5), which many of the think tanks had introduced, became

³⁴ All think tank reports did recommend strengthening mitigation measures and better cooperation on climate change on the international level. However, the underlying core narrative of territorial security rather encouraged actions in the security and military sector.

³⁵ The idea to oblige the DOD to integrate climate threats into its planning originally was one of the recommendations of the 2007 CNA report (CNA 2007: 46).

much more widespread. In relation to this, the DOD began to highlighted the importance of “whole-of government” or “whole-of-community” approaches to tackle today’s complex security threats and in particular climate change (DOD 2010: 70, 74, 87, 2014b: 22, 33, 2012: 6; Interview 2014k). While this will have effects on the development and climate sector (as the demand for specific security related data will increase), it also and to a considerable extent “climatized” (Brzoska and Oels 2011; Oels 2012a) the security and military sector itself. Thus, security and military experts began to adopt concepts from climate science and in addition transformed the military to be fit to meet future climate challenges.

In addition to these concrete policy effects, the leadership of the DOD³⁶ (Interview 2014k) and several high ranking military officials began to publicly acknowledge climate change as a serious security problem. In 2013, Navy Admiral Samuel L. Locklear (chief of the US Pacific forces) even called it the “biggest long-term security threat in the Pacific region” (Bender 2013). President Obama and several senior members of his administration at various occasions highlighted the security implications of climate change and acknowledged the security framing of some of the think tank reports. While Hillary Clinton as Secretary of State had not made climate change a priority, her successor John Kerry (Davenport 2014a, 2014b) and both Secretaries of Defense Leon Panetta³⁷ (Munoz 2012) and Chuck Hagel (Davenport 2014c; Bendery 2014) were quite outspoken on the security implications of climate change. The most recent public announcement was a speech of Obama before the US Coast Guard in which he again highlighted his conviction that: “climate change is one of those most severe threats” (Obama 2015). Eventually, in May 2015 the White House published a report that summarised all national security implications of climate change as put forward in federal reports (The White House 2015). Beyond that, the US intelligence sector picked up climate change and its security related effects as well. After the *Intelligence Authorization Act for Fiscal Year 2008* had tried to prompt the intelligence agencies to consider the national security and geopolitical implications of climate change, climate change was indeed mentioned in the *Intelligence Estimate* (NIE) 2008 (Fingar 2008) and thereafter integrated into the *Annual Threat Assessments for the Senate Select Committee on Intelligence* (Blair 2009). In 2009, the CIA even founded a *Center for Climate Change and National Security*. Although the Center was

³⁶ Since the leadership of the DOD and other government departments is determined by the party which controls the White House and the Presidency, the interest for climate matters could decrease if the Republicans (who are still more sceptical concerning climate security arguments) would win the 2016 Presidential elections.

³⁷ Panetta had already appeared earlier as important advocate of the climate security framing. In 2009, when he was still head of the CIA, the organisation had opened a Center on Climate Change and National Security (CIA 2009).

disbanded in 2012 as stand-alone office the CIA continued to monitor the security implications of climate change in different regional departments (Broder 2012; Interview 2014j). Finally, as recommended by many think tank reports (especially in the more recent ones, see CNA Military Advisory Board 2014), and reinforced by increased media coverage of natural disasters and climate change effects in the US, climate change effects were also integrated in the natural disaster sector. Hence, eventually climate change and its various effects on individual people living in the United States also made it into several disaster management plans of the FEMA (2012; Brzoska 2012). In addition, the DHS integrated climate change effects into its National Infrastructure Protection Plans (2013).

Overall, the securitisation of climate change resulted in a climatisation (Oels 2012a) of the security, defense and intelligence sector in the US and refocused the debate on adaptation instead of mitigation measures³⁸. Although all think tank reports include recommendations to strengthen genuine climate mitigation measures and to increase US leadership in the international negotiations as well, the overall result so far is a focus on adaptation measures. This has to do with strong political opposition against any form of binding emission cuts by Republicans and influential economic actors as well as with the still strong legacy of the climate sceptic or denier argument especially amongst Republicans (Stromberg 2015). While the fact that climate change is happening and has security-related effects became widely accepted, the question of whether or to what extent climate change was anthropogenic still remained open for many people in the US. Thus, to evade difficult political discussions, many politicians and even some of the think tank reports and their military advisors tried to avoid this controversial part of the argument by focusing on tackling the security issues with adaptation measures. This is not to say, that federal climate legislation and mitigation measures could not be advanced in the future and be legitimised with security argumentations. Moreover, as many of the think tank actors were hoping, the focus on concrete and uncontroversial adaptation measures could become an important door-opener for more extensive climate measures in the future (Interview 2014j). For the time being however, the dominant territorial security discourse redirected attention to adaptation and military planning in the United States.

³⁸ This shift from mitigation to adaptation is not the result of the climate security framing alone. There is also an increasing awareness of adaptation measures in the global climate debate coming from developing countries that demand compensation for losses that they have already suffered as result of climate change and from actors from the development cooperation sector. Nonetheless, I think that the unique climate security framing in the US further reinforced and legitimised this trend.

6. Facilitating Conditions and Context for Securitisation in the US

In this section I turn to the question to what extent the broader contextual conditions in the US have shaped the fairly successful but at the same time very distinct securitisation of climate change. During the first phase in the late 1980s and early to mid-1990s, environmental issues in general were still quite important in the US and the country was deeply involved in the early international climate negotiations. Moreover, the first climate security debate fell into a time when the end of the Cold War and new theoretical approaches to security from International Relations had led to new security concepts such as environmental security becoming popular in political circles as well (Krause and Williams 1996; Dalby 1992b, 1992a, 2002; Deudney 1990). Moreover, the international climate security argumentation at that time also highlighted especially the planetary and individual dimension. This was in line with the rather cautious scientific language concerning climate change that always entailed margins of error and great uncertainty, thus, facilitating a risk-focused and long-term argumentation. More than it is the case today, climate change at that time still seemed to be a faraway environmental problem that would mostly concern distant places in the world and that one would be able to handle. Thus, it is not surprising that the US climate security debate at that time also leaned towards the planetary and individual level and risk dimension and that the argumentation often focused on bringing about effective international agreements and genuine climate protection measures. However, despite the predominance of these discourses, several concrete measures materialised not only in the environmental sector but also in the defence and security sector. Reasons for this are deeply embedded cultural and institutional characteristics that clearly set the US apart from many other countries.

Going back to the struggle for independence against Great Britain and having stood on the right side of history in many of the wars of the 20th century in the eyes of the majority of US-Americans, the military has an exceptionally good reputation in the United States and is widely perceived as a politically neutral actor that only approaches the really important issues in a practical manner³⁹ (Interview 2014c, 2014l). Thus, bringing in the military into debates that touch on security questions is generally an accepted strategy and does not trigger great resistance or fears of militarisation as it is the case in other countries, for example in Germany (Wagner 2008). Moreover, the US military itself has assumed a much more active role in the climate security debate but also in coping with climate change in general than it was the case

³⁹ Although there certainly is opposition to this sympathetic view of the military, it is not as widespread as in other countries (e.g. in Germany) and the majority of people and political practitioners have an overall positive opinion about the military (Gallup 2014).

in other countries. Due to its broad international presence, the US military is often one of the first actors that delivers humanitarian aid in cases of natural disasters (e.g. in the case of the tsunami in the Indian Ocean in 2004 or the cyclone Nargis in Myanmar in 2008) (Interview 2014m). In addition, the Army Corps of Engineers (2015) and the National Guard are both important actors in the domestic natural disaster management plans. The National Guard's involvement in the aftermath of hurricane Katrina in 2005 in its largest domestic operation with the deployment of over 50.000 troops represents an important example (US National Guard 2015)⁴⁰. In this context, the military itself had the opportunity to witness a growing frequency and intensity of natural disasters and was therefore eager (at least at the leadership level) to address climate change (Interview 2014k, 2014h; US Navy 2009). Apart from the direct focus on climate change, the US military still conceives itself, and is perceived by others, as one the most important forces for global order. Hence, it is much more affected by increased instabilities and conflicts around the world due to climate change than the Armed Forces in other countries (Interview 2014m).

Closely connected to this favourable image of the military and the high standing of it in political decision making is the predominance of the concept of national security in the United States. Coupled with a strong patriotic sentiment and sometimes quasi-religious status of the political system, questions of national security are one of the cornerstones of the United States as a nation and have constantly contributed to (re)constituting its identity against the outside (Campbell 1992). Evoking security taps into this predominant national security discourse, even though new security concepts have extended its meaning since the 1990s. Thus, it is not entirely surprising that even the more individual and planetary focused securitisation that prevailed in the 1990s, eventually had considerable effects in the security sector as well.

The importance of the military and national security conceptions became even more apparent in the second climate security debate when a territorial security framing of climate change was, besides the real believe that climate change would affect national security, intentionally used to overcome the gridlocked and polarised climate debate at that time. Facilitating factors for this transformation of the dominant framing were new scientific projections – especially the 4th IPCC report (2007b) – and observations of the Navy that could increasingly be used to point to the national security effects of climate change (US Navy 2009, 2010). By focusing on this particular discourse, the orchestrating think tanks and individuals could take advantage of the credible voice of the military and the political weight that questions

⁴⁰ It was also one of the most contested operations and was criticised as excessive militarisation and reinforcing class and racial divides (Tierney *et al.* 2006; Giroux 2006; Masquelier 2006).

of national security can give to an issue. In addition, it presented them with the opportunity to particularly convince the much more climate-sceptical actors on the centrist, conservative and Republican side of the political spectrum. Evoking images of national security and letting the military and security professionals deliver the message provided a common ground and above all a discursive armour for politicians when talking about climate change. At the same time, using this narrative the think tanks and politicians could clearly set themselves apart from a supposedly naïve, left-wing, liberal and environmentalist framing that previously had been associated with climate change.

This last point brings to the fore another distinguishing contextual factor of the US case, meaning the extensive political polarisation of climate issues along party lines. This clash had not been as pronounced in the early days of the environmental and climate debate in the late 1980s and early 1990s. Yet since the Clinton administration's aggressive campaigning, especially by Al Gore, environmental and climate issues became distinctly liberal and associated with the Democratic Party and sparked an influential and mostly Republican countermovement of climate sceptics and deniers (Falkner 2005; McCright and Dunlap 2011). This trend consolidated under George W. Bush and led to a situation in which it became very difficult to publicly talk about these issues without triggering a major political headwind (Interview 2014). Thus, a framing of climate change as an environmental issue by traditional environmentalist organisations such as Greenpeace or TNC, would only have reinforced the political divide and due to the US political system that often sees a divided Congress, would almost certainly have prevented any political action on climate change. In addition, in the US political system local constituency plays a much more important role even at the federal level than it is the case in other countries. Even many (supposedly more environment friendly) Democratic Senators face strong business interest from their home states and had difficulties voting for decisive climate legislation. Therefore, the territorial security framing of climate change tapping into the deeply anchored national security discourse that often carries a “rally around the flag” effect, helped in finding a common denominator and uniting conflicting views. The polarised political environment and the strategy to set the climate security argument apart from earlier environmentalist framings are further important reasons for the one-dimensional impact of the climate security debate that had – at least initially – mostly led to measures that can be subsumed under the term adaptation.

7. Conclusion

In this paper I set out to uncover how climate change has been securitised in the United States. More precisely, I looked into which discourses and actors were dominant, what structural conditions played a role, whether this securitisation can be considered successful, and what political consequences were legitimised and enabled. The analysis revealed that there was a clear transformation in the way in which climate change was constructed as a threat. While in the first environmental and climate security debate, the planetary and individual level and the risk dimension overweighed, the second phase saw a much more territorial security focused argumentation. This was closely related to the most important actors that controlled the second debate, which were mostly think tanks specialised in security and defence policy. On the one hand, they chose a different framing because they feared an increase in the security effects of climate change for the US military and wanted to improve defence policy. On the other hand, they also saw a strategic advantage in reframing the climate threat because it could both reinvigorate and bridge the polarised political debate on climate change and overcome the largely unsuccessful environmental framing of the issue. Apart from the actors, the paper also highlighted various structural preconditions in the US that contributed to this particular securitisation, most importantly a very good reputation and credibility of the military and the importance of national security conceptions. As a consequence of the predominant territorial climate security discourse, the political ramifications materialised particularly in the security and defence sector and at least so far tend to fall into the adaptation category.

These findings shed some light on how securitisation processes function in general. The findings of the US case particularly highlight the importance of actors and the distinct security discourses they use for the political consequences of securitisation. Thus, the case shows that a to a large extent unified framing by several influential non-state actors can have a decisive impact on the political debate and lead to a successful securitisation in terms of changing the political debate and important policies. Moreover, it exemplifies that a few influential individuals (here particularly Sherri Goodman and Kurt Campbell) can have a great impact on bringing about particular security discourses and in a way act as discursive entrepreneurs. Yet, the US case also made clear that a predominantly territorial security framing tends to confine the impact to the security and defence sector and to adaptation measures, neglecting more fundamental mitigation measures in the environmental sector. Especially this last finding raises normative questions about how to assess the present climate security debate in the United States. Starting out from the assumption that climate change can only be stopped by eliminating or at least by considerably reducing greenhouse gas emissions, a focus on adaptation measures

in the security and defence sector does not seem very promising. Moreover, the predominant discourse in the US almost completely excluded environmental organisations and their viewpoints from the debate. However, this assessment has to take into account the broader political and societal context in which the climate security debate took place. As the largest cumulative contributor to global greenhouse gas emissions, who has only recently been overtaken by China concerning annual emissions, the United States was for a long time one of the most open critics concerning climate measures and binding commitments – and consequently also one of the greatest laggards – especially during the period when the second climate security debate began. Thus, the climate security discourse at hand was one of the few opportunities to open up the debate and to draw attention back to climate matters in general. In addition, it could also constitute an important first step and a door-opener for more fundamental mitigation commitments in the future. Thus, from a pragmatic and consequentialist viewpoint (see Floyd 2007), the territorial security discourse could still, to some extent, be assessed as positive. Moreover, the shift to adaptation is a trend that is not only influenced by the territorial security discourse in the US but has become much more important in the general global climate debate as well. Contrary to the tenor in the first half of the 21st century, adaptation measures are no longer necessarily considered as detrimental to mitigation efforts. This has to do with the fact that various climatic effects already begin to materialise and can no longer be prevented by mitigation. Hence, especially the most affected developing countries demand immediate support in their adaptation efforts.

However, this somewhat positive assessment only holds true in the short term and if the current climate security debate actually opens the door for mitigation measures in the near future. Otherwise, the predominant discourse could contribute to a much more problematic development as pointed out by critics of the climate security debate (Hartmann 2009, 2010; Oels and Lucke 2015), in which the industrialised countries shrug of their mitigation responsibility by primarily focusing on the security risks of climate change and on adaptation measures.

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