

**ENERGY AND SECURITY:  
DISCOURSE AND PRACTICE IN THE UNITED STATES AND CHINA**

**By**

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## **Abstract**

This thesis conducts an in-depth empirical analysis of the way in which energy was constructed as a security issue in the United States and China between 2004 and 2012. The core argument is that energy security is contested: it means different things to different people in different contexts. State energy security discourse and practice in both states constructed energy largely as a national security issue, emphasising the need to secure the state in economic and/or strategic terms by providing secure energy supplies at stable prices. This is found to be problematic and ‘negative’, as encouraging competition over finite fuels perpetuates insecurity for states, and fails to secure human beings and the environment. Thus, it does not produce security. However, there are a number of competing marginalised energy security constructions, which forward a more ‘positive’ notion of energy security – emphasising sustainability and human welfare. By illustrating the contested nature of energy security, this thesis contributes the first in-depth critical empirical analysis of energy security constructions. It thus brings together insights from critical approaches to security with the empirical area of energy security to understand how energy security is constructed, while raising important theoretical questions about the importance of context for understanding the value of security and the potential for moving towards more ‘positive’ energy security discourse and practice.

*Till farfar*

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## List of Abbreviations

APEC	Asia-Pacific Economic Cooperation
BTSCE	Billion tonnes of standard coal equivalent
CNPC	China National Petroleum Corporation
CNOOC	China National Offshore Oil Corporation
CO <sub>2</sub>	Carbon Dioxide
CPC/CCP	Communist Party of China/Chinese Communist Party
CSIS	Center for Strategic and International Studies
DoE	Department of Energy (US)
DoD	Department of Defense (US)
EIA	Energy Information Administration
EPA	Environmental Protection Administration (US)
ERI	Energy Research Institute (China)
GDP	Gross Domestic Product
GEI	Global Environmental Institute
IEA	International Energy Agency
IFCE	International Fund for China's Environment
JUCCCE	Joint US-China Collaboration on Clean Energy
NDRC	National Development and Reform Commission (China)
NEC	National Energy Commission (China)
NEA	National Energy Administration (China)
NEP	National Energy Policy (US)
NGO	Non-Governmental Organisation
NOC	National Oil Company
NPC	National People's Congress
NRDC	Natural Resources Defence Council
OPEC	Organization of Petroleum Exporting States
PRC	People's Republic of China
TOE	Tons of oil equivalent
UNFCCC	United Nations Framework Convention on Climate Change
WCED	World Commission on Environment and Development
WRI	World Resources Institute
WWF	World Wildlife Fund

### China:

10<sup>th</sup> Five Year Plan: 2001-2005

11<sup>th</sup> Five Year Plan: 2006-2010

12<sup>th</sup> Five Year Plan: 2011-2015

## Introduction

*...energy supply is a matter of national security*

(George W. Bush 2006)

*energy security is our permanent concern as our country's natural resources are inadequate*

(Chinese energy official, Xinhua 2011b)

The planet cannot survive if we continue to consume fossil energy at current rates. Yet, continued energy supplies are essential to maintain human life as we know it. The world still depends largely on finite and dirty sources of energy, and the growing pace of human development has been accompanied by ever faster resource depletion. Today, ‘we are seeking more, but finding less’ (Klare 2008: 39). This is an increasingly serious concern for states, who depend on continued energy supplies to survive. Energy has moved from being a part of domestic economic policy, to ‘an issue of the “high politics” of national security’ (Lieberthal and Herberg 2006: 13). We are facing a changing world order characterised by a ‘new geopolitics of energy’ (Klare 2008: 6), and nowhere is this taken more seriously than in the United States and China. They are not only the two largest energy consumers; they are also the largest net oil importers. This makes them particularly vulnerable to changing global energy dynamics – which risk affecting both economic and political stability. Growing tension over rising energy demand and depleting resources impact state behaviour, with growing fears of a ‘resource race’ which may well result in conflict between major powers (Klare 2008: 30). Energy security is one of the most

important issues today, bearing direct impact on the continued survival of human civilisation as we know it.

Energy security is usually understood as the availability of secure energy supplies at stable or reasonable prices. It remains closely linked with national security, both because of its importance to state survival, and because of the political nature of energy resources. Traditional energy resources are an inherently geopolitical issue – they are not only finite, but also considered the ‘property’ of the state in which they are located (Mulligan 2010: 89), rather than being part of the global commons. Meanwhile, states are heavily involved in energy policy-making, whether through market-regulation, taxation, energy subsidies, technology research and development, or more directly through state-ownership<sup>1</sup>. The existing debate on energy security has been characterised by competing perspectives on how to best provide secure energy supplies at stable prices. The realist, or ‘strategic’ camp assume that competition over resources is inevitable in an anarchic world, and thus advocate controlling supplies, whether through investment and/or political links with exporting states, or through energy independence. Meanwhile, the liberal, market-based approach suggests cooperation over energy is possible and desirable, and so advocates liberalising energy markets and increased energy integration. The meaning of energy security, however, is rarely questioned. The domain of energy is ‘saturated with the language of security’, and a look at existing debates suggest ‘that there simply is no need to debate what energy security is, because we know both *that* energy is a security issue and *what* security is’ (Ciută 2010: 125).

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<sup>1</sup> National Oil Companies (NOCs) today own over 80 per cent of confirmed oil reserves (Klare 2008: 17).

The very meaning of energy security implies a focus on providing fossil fuels for the state. The idea of ‘security of supplies’ depends on a notion of finite, geographically-bound hydrocarbon resources – owned and extracted by states, and supplied by states to other states. Security is achieved when a state has access to stable supplies, whether through own production or reliable import. The notion of stable prices assumes the existence of a global market, which puts the focus on oil and the states which import it, as the main source of energy openly traded on a global market<sup>2</sup>. Here security is achieved when prices remain stable, and this stability depends partly on supply continuity. Thus, as currently understood, providing energy security involves ensuring secure supplies of fossil fuels at stable prices to importing states – whether through strategic or market-based means. The existing energy security literature focuses largely on strategies for achieving energy security on these terms. Problematically, contemporary understandings of energy security are closely linked with a traditional understanding of both energy and security: the emphasis remains on fossil fuels, and the security of the state remains at the centre. Not only is this understanding of energy security outdated, it is also counterproductive.

Energy cannot be understood as a security issue in isolation – how energy security is pursued has a direct impact on climate and human security. The world is increasingly interconnected, and the growing speed of environmental change caused by climate change has profound implications for how we understand security. There is a need for ‘immediate action to drastically curtail greenhouse gas emissions for everyone’s security...[t]his is not security understood as preparing for war with rival states...[e]nvironmental change now makes the necessity of rethinking security unavoidable’ (Dalby 2009: 172). Rather than states securing themselves at any cost, such a change requires ‘abandoning many of the

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<sup>2</sup> This is not to suggest that other energy sources are not traded, only that they have so far been less open to being traded openly on the market for various reasons (not least transportation difficulties) and thus do not experience price volatility in the same way.

traditional geopolitical premises of security thinking’ and putting sustainability ‘at the heart of a security strategy’ (Dalby 2009: 158). Growing interconnectedness and the changing nature of threats require new forms of state behaviour and new priorities. To provide security, states can no longer maximise their own security at the cost of other states: ‘to secure nations, states must ensure that the world is secured’ (Burke 2013: 13).

Energy security as currently understood relies on a traditional, state-centric notion of security whereby the state has to maximise its security to protect itself from external threats – in this case supply instability and price volatility. This notion of energy security enables and encourages zero-sum competition between states over fossil fuels to stabilise or even maximise their own supply, driving up demand. This works to increase tension and mistrust between states, producing insecurity in traditional terms. Moreover, the link between energy and national security also enables a focus on securing state fossil fuel supplies at the expense of the future of the climate and human security. Paradoxically, state maximisation of fossil fuel supplies in the name of national (energy) security is a direct cause of climate change<sup>3</sup>, which, if allowed to continue on present paths, will be a major cause of insecurity for states, the planet and the human beings who rely on it to survive. Thus as energy increasingly becomes incorporated in state security agendas, attempts by states to respond paradoxically produce insecurity.

This thesis interrogates this puzzle in a detailed analysis of the relationship between energy and security. It draws on a range of literature under the heading of critical security studies, a broad and divisive subfield, which developed largely as critiques of traditional security studies in the post-Cold War era (Krause and Williams 1997). Using this framework, it

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<sup>3</sup> See International Energy Agency (2007: 28).



suggests that there is a need to reconsider the meaning of energy security, highlighting the political nature of security. ‘Security’ is not neutral or objectively existing, but constructed. To have meaning, it ‘presupposes something to be secured; as a realm of study it cannot be self-referential’ (Krause and Williams 1997: ix). In conventional security studies, as in energy security discussions, this ‘something’ to be secured is always the state. Moreover, the state is not only the object to be secured; it is also the sole security actor, working to maximise its security to ensure its own survival (Mearsheimer 1990: 12). Following this, security has become considered both an expected and accepted policy goal. However, it is argued here that security is never neutral, but always political.

Calling something a security issue suggests a number of things – that the speaker believes the issue is important, that it is one of survival, and that the issue needs to be dealt with urgently. The process and language used to invoke security in turn makes very particular policy possible (see Buzan et al. 1998). This thesis raises questions over the meaning and ethics of energy security, looking at who or what should be secured, who speaks security and for what purpose, and whether security practice is useful or positive when it comes to energy. In this process it suggests that security is not unequivocally ‘good’, or ‘positive’, but that security means different things and works in different ways depending on how it is used. It affirms an ethical commitment to making human beings the primary subject of security, following Walker (1988: 128). The growing interdependence of human beings and the environment, moreover (see Dalby 2009), make a stable environment and climate a necessity for people to be secure, today and in future years.

## Research Questions

Following this, the central research question of this thesis is:

- How is energy security constructed in discourse and practice in the US and China?

Approaching this question with a focus on the relationship between energy and security

has led to the following sub-questions:

- What does it mean to attach ‘security’ to energy?
- What is the value of (energy) security?
- *Should* security be attached to energy?

This research is driven by the conviction that it is necessary to look at the concept of energy security and how it works in an empirical context. Problematically, the mainstream literature on energy security accepts both the meaning and the value of energy security as given. It does not question whether energy is a security issue, nor what it means to speak and/or write ‘security’ in the context of energy. In contrast, the focus here is on investigating how energy security is represented and practiced, in short, how it is constructed; and how security works in this process. While the existing literature contains some interesting conceptual discussions on energy security (see Mulligan 2010; Ciută 2010), these lack in-depth empirical engagement. In contrast, this thesis builds upon a conceptual interest in energy security to analyse how it works in two different empirical contexts, using this to construct an account of the relationship between energy and security which is both conceptually developed and empirically informed. Ultimately, the purpose is

pragmatic - to generate useful knowledge to understand how energy security works. The empirical focus here is on energy security in the United States and China as they are the top two energy consumers and importers globally, which makes them particularly vulnerable to energy (in)security issues. This follows Friedrichs and Kratochwil's 'most-important' case design which aims to help conceptual clarity (Friedrichs and Kratochwil 2009: 718). The analysis starts in 2004, as the year of 'the global demand shock', with a huge increase in global oil consumption, putting energy security at the top of the national security agenda (Yergin 2011b: 193).

In being interested in how the concept of energy security works, this research takes a different methodological approach to the mainstream energy security research. This results in a 'refusal of [a positivist] causal epistemology' (Hansen 2006: 17) and thus in asking different questions, since I am not testing a hypothesis or evaluating a causal claim in the traditional sense. Rather than asking 'why' energy security is constructed in a particular way, this research focuses on 'how' energy security is constructed, following Doty:

why questions generally take as unproblematic the *possibility* that particular policies and practices could happen. They presuppose the identities of social actors and a background of social meanings. In contrast, how questions examine how meanings are produced and attached to various social subjects and others, thus constituting particular interpretive dispositions that create certain possibilities and preclude others (Doty 1996: 4)

Ultimately, discourses work to construct subjects in particular ways, allowing particular 'possibilities of practice' to emerge because of the reality that is constructed (Doty 1993: 304). Consequently, this research looks at how particular representations of energy security work to make particular policies possible and others less likely. In this process it follows Hansen's understanding of discourse and policy as 'co-constitutive' (Hansen 2006: 22; also Milliken 1999). This simply means that particular discourses and policies

reproduce each other, with discourses enabling particular policies, which in turn make those discourses possible and accepted as ‘common sense’. Thus, discourse and policy stand in a constitutive, rather than a causal, relationship. As a result, I use the word ‘construction’ in this dual sense, with the phrase ‘energy security *constructions*’ referring to both discursive and policy practices. Because of the focus on how energy security works in practical empirical contexts, a range of critical approaches to security were considered and used where helpful<sup>4</sup>. Following this, analysis began ‘with a set of discourses’, asking: “‘what do they do?’” (Weldes et al. 1999: 10).

In this understanding of security I follow a critical constructivist approach, drawing on post-positivist epistemology and research methods, ‘recognizing the constitutive power of discourses while also acknowledging the possibility for political actors to affect change’ (McDonald 2012: 16; see also Weldes et al. 1999; Doty 1998; Fierke 2007). As such, the research aims to disrupt ‘common sense’ understandings (Milliken 1999: 229) of energy security to illustrate that energy security could, and perhaps should, be constructed differently. Approached in this way, opening up potential for change involves challenging ‘some of the naturalised assumptions of the dominant representations of the world’ and could go as far as reimagining the world (Weldes et al. 1999: 21). In pursuit of this goal, the research analysed both dominant and marginalised energy security discourses in the US and China, moving between the different discourses to illustrate the contested nature of energy security, opening up the meaning and providing potential for change.

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<sup>4</sup> Securitisation theory was a useful starting point and guide to how security works in some cases. However, the focus of the research was not whether or not energy is securitised, but rather how ‘security’ works when applied to energy in the US and China. Consequently, securitisation theory was used only as a guide and a reference point (Wilkinson 2013b: 8), providing one way to explain security processes rather than the definitive account of all such processes. This also enabled me to go outside securitisation theory and study articulations of security which do not fit within the framework, where the theory was of limited use. This is discussed in more detail in chapter two.

This process followed a critical approach, which allows for ‘a normative choice in favour of a social and political order different from the prevailing order, but...limits the range of choice to alternative orders which are feasible transformations of the existing world’ (Cox 1986: 130). The focus on existing alternative constructions of energy security already ‘out there’ in the discursive space was underpinned by a concern with power and an unwillingness as a researcher to impose an ‘ideal’ type definition of energy security. Moreover, building an alternative understanding of energy security on discourses already ‘out there’ is seen as a more feasible path for change, as opposed to constructing an ‘ideal’ alternative and simply sitting back and waiting for it to be ‘adopted’. Considering what an alternative approach to energy security might look like was an essential part of advocating change, as ‘[o]ne...needs to know for what one is fighting, what kind of society one wants to establish’ (Laclau and Mouffe 2001: xix). Thus, this was in a sense a process of envisioning the future, to ‘make the future meaningful and to lay out [alternative] possibilities of being in the world’ (Berenskoetter 2011: 648).

This research is underpinned by a strong normative commitment, driven by a lack of normative considerations in the field of energy security. Based on this, this research looks first at how security works when attached to energy in the United States and China, focusing on how security is used in different discourses and practices: who or what is being secured, how the process of securing is undertaken, by whom, and what the outcomes are. This is then used to argue that energy security is contested – it means different things to different people in different contexts, and thus in this case security is neither inherently ‘good’ or ‘bad’. The final chapter uses these existing competing notions of energy security to develop a framework for what a more ‘negative’ or a more ‘positive’ energy security looks like - and to suggest that we can move towards more positive energy

security practices by understanding how security works and drawing on and building on more positive constructions of energy security. Consequently, while many critical approaches dismiss security as a problematic concept, I argue that the concept of security is often positive. As a result, locating more positive constructions of security in practice begins to disrupt traditional, more negative notions of security, and as such can open up space to move towards more positive constructions of security.

## **Argument and contribution**

### *Argument*

The argument in this thesis proceeds in three parts as follows.

*Firstly, it is argued that energy security means different things in different contexts, and it is sometimes more ‘positive’, and sometimes more ‘negative’.* Critical academic debate on the value of security has characterised security either as an essentially ‘positive’ value to be fought for (see Booth 1991, 2005a, 2007), or as having inherently ‘negative’ consequences and therefore as best avoided (Buzan et al. 1998)<sup>5</sup>. It is argued that both of these understandings of security are problematic for analysing energy security, as they impose a fixed and narrow interpretation of security. It works to limit the study of security to how security works when situated actors ‘happen to act in theoretically prescribed ways’, with theory taking precedence over situated security practice (Ciută 2009: 316). This then closes down and limits the study of security to pre-determined categories. Instead, it is argued here that security does not have an intrinsic ‘essence’ or meaning (Ciută 2009: 303-4). Language is ‘inherently unstable’ (Hansen 2006: 17), and as a result, while particular constructions of energy security rely on specific meanings of security,

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<sup>5</sup> There is also an emerging literature on positive /negative security which will be discussed in more detail in chapter two (see Roe 2008, 2012; Floyd 2007, 2011; Hoogensen Gjørsv 2012).

these meanings are neither fixed nor final but have to be continually reproduced. All representations and discourses can be contested, and thus there is always space for change (Doty 1996: 6). Vitally, if security has no ‘essence’, it can never be objectively, or intrinsically ‘negative’, as in the Copenhagen School’s understanding, nor fundamentally emancipatory as in the Welsh School’s approach. Rather, some energy security constructions are more ‘positive’, and some are more ‘negative’. This works to open up analysis beyond existing frameworks to analyse a wider range of security constructions.

*Secondly, I posit that energy security as currently constructed is problematic and can be characterised as negative.* This can be seen in more detail in chapters four and five which discuss state constructions of energy security in the US and China between 2004 and 2012. There is a link between energy security as currently constituted and a very particular understanding of national security which justifies and underpins a negative construction of security, enabling policies which cause insecurity. Energy security is constructed and defined by elite actors working in various parts of the security establishment, with little or no input from non-elite, non-state actors, or even from other government departments working on related issues such as climate security. These actors construct the state as the referent object to be secured, against external threats in the form of (fossil fuel) supply/price disruptions. Energy security is thus narrow both in terms of actors and in terms of referents – a small number of situated actors define energy security and its referent. This is neither democratic nor does it produce security beyond protecting the continued existence of the state. They also reproduce insecurity, through the reproduction of friend/foe, threat-defence thinking, prioritising the security of the state above the security of human beings and the environment they depend on to survive. This enables policy choices which secure the state’s fossil fuel supplies at the expense of international

cooperation and climate stability, endangering the future of the planet which human beings depend on to survive. In this way it produces insecurity for states, the environment and individual human beings. Thus, the argument that security needs to move away from traditional geopolitical premises is not simply a case of ethical preferences, but of ‘strategic necessities’ (Burke 2013: 21). Ultimately, if security is about survival, then the national security project has failed. However, while the way energy security is currently constructed in dominant discourse and policy in the US and China is undoubtedly negative, these meanings are not fixed but constructed through discourse and practice, and can therefore be contested.

*Thirdly, if we look outside traditional actors and places of study in international security, energy security is sometimes constructed more positively.* Chapter six presents an active search for more positive, alternative constructions of energy security in the United States and China. It looks both at marginalised state energy security discourses, and discourses produced by non-state actors, focusing on non-governmental organisations advocating for a change in energy policy. In these discourses, security is no longer ‘exclusive’, but concerning multiple or inclusive referents. They emphasise the need to secure beyond the state, reframing security away from national security and towards securing human beings and ecosystems, both in their own right and for human needs. A growing number of actors are involved, often operating across national borders, though states remain important as political actors. Sustainability is a key principle behind these notions of energy security, emphasising the need for humans to coexist with nature in a way that does not compromise the social, economic and environmental needs of future generations. This is used to illustrate that energy security does not have to be negative. Building on these existing positive energy security practices provides potential for change. Vitrally, it enables a



positive energy security to harness the power in ‘security’, recognising that ‘it is not necessary to reject the concept of security in order to think about peace and justice; just the particular understanding of security through which the concept has more or less been turned into its opposite’ (Walker 1988: 161).

### *Contribution*

Following this, the primary contribution of this thesis lies in bringing together conceptual insights from critical approaches to security with empirical cases from the subfield of energy security studies to understand how energy is constructed as a security issue. As has been noted, despite the growing significance of ‘energy security’ within the realm of policy, the concept itself has largely escaped critical scrutiny. Likewise, critical work has tended to look at ‘security’ as an abstract whole rather than in terms of energy specifically. Where critical work has touched on the issue of energy it has thus far not engaged in the level of empirical detail offered by this thesis. As an increasingly important area of research, energy security provides new insights for critical security studies, most notably raising questions about how security in particular ‘works’ – and what it ‘does’ – when attached to energy.

To this end, the thesis provides in-depth and empirically rich analysis of how energy security is understood and constructed in discourse and policy in the US and China, drawing on over 700 documents and original interview data with experts and policy-makers. In this process, it illustrates a clear problem with the way in which energy security is approached: *it does not, and cannot, produce security*. Problematically, the existing energy security studies literature overlooks the construction of energy as a security issue and remains focused on solving state fossil fuel supply problems, rather than questioning

or interrogating what this very specific understanding of energy security does. Moreover, as discussed previously, it fails to recognise that such a (negative) understanding of energy security contributes to and reproduces insecurity. Likewise, it cannot provide any potential for changing existing policy to move away from the current energy security dynamic. By drawing on critical approaches to security, this thesis highlights the constructed and contested nature of energy security, in the process opening up potential for movement towards more ‘positive’ energy security practices.

In turn, applying critical approaches to understand energy security raises theoretical questions about how ‘security’ works and what it ‘does’ when attached to energy. Energy poses new challenges for understanding security; most notably illustrating that ‘security’ does not work the same way in all contexts. Overall, energy security is contested – it means different things to different people in different contexts. While some constructions of energy as security are negative, others are more positive. This raises important theoretical questions about the importance of context for understanding the value of security and the potential for moving towards more ‘positive’ energy security discourse and practice. By drawing on literature emphasising the contested and contextual nature of the meaning of security, suggesting that security has no ‘essence’ (Ciută 2009: 303-4), I argue that if security has no fixed meaning, it cannot have a fixed value. Thus security cannot be inherently ‘negative’ or ‘positive’, as the value varies depending on how security is used – it is contextual (see Floyd 2007 for a similar argument using securitisation theory). Following this approach and argument, this thesis moves away from abstract theorising of security towards a more pragmatic, policy-relevant approach, using empirical analysis of a range of sources to illustrate that energy security constructions range from more negative to more positive, using already existing constructions of energy

security to develop an idea of what a more negative and a more positive energy security policy looks like.

Like all research constrained by time and practical concerns, this research has a number of limitations. It does not address solutions to energy security as traditionally understood, providing no solutions to or in-depth discussion of how to provide states with secure energy supplies at stable prices. This does not mean that this is of no concern, merely that this is dealt with better elsewhere and is outside the boundaries of this research. Likewise, the research looks only at two empirical cases during a limited time period and with limited resources; focusing primarily on how the concept of energy security is constructed. Lastly, the research only provides one, situated answer to how energy security is constructed. As such, it does not claim to provide a neutral or objective ‘truth’, but rather to suggest one possible solution to how we can rethink energy security and move forward towards more positive energy security practices.

## **Wagers**

This section briefly outlines the underlying methodological assumptions, or ‘wagers’, on which this research is based, starting with a discussion of the role of knowledge claims, the use of critical constructivism as an approach, and a discussion of normativity.

For clarity, methodology is here understood broadly as ‘philosophical ontology, setting the context within which particular practices of knowledge-making might make sense’ (Jackson 2010: 32). All research rests on philosophical-ontological wagers that can never be ‘settled’, or proven definitively (Jackson 2010: 34). These wagers ‘constitute worlds, in that they quite literally set the stage for the kinds of empirical and theoretical puzzles and

challenges that a scholar takes to be meaningful and important' (Jackson 2010: 34). It is essential to be open and clear about the wagers on which research undertaken rests: they ultimately define 'the researcher, the world to be researched, and the character of the relationship between them' (Jackson 2010: 35). The vast majority of work on energy security rests on neopositivist assumptions, viewing the researcher and the world to be researched as separate. On these assumptions, valid knowledge claims have to correspond to an objectively existing reality, and this is ensured through hypothesis-testing or by producing cross-case comparisons. In contrast, this research rests on different methodological assumptions, understanding the researcher as an inseparable part of the world being researched. Following this, we cannot speak of a 'world' existing separately from 'the activities of making sense of that world' (Jackson 2010: 36; Yanow 2006). As researchers, we do not have 'privileged, objective access' to an independently existing empirical world (Neal 2013: 44). This does not mean that research is impossible, but that we need to acknowledge the role of the researcher in the process. Ultimately, no research is neutral and there is always an 'ineluctable debt to interpretation' (Campbell 1998b: 4). Research involves making a number of choices throughout the research process and as such any results and answers necessarily reflect a researcher's interests and choices.

Following these wagers, the approach taken in this research is pragmatic. As our knowledge cannot have secure foundations, the aim is instead to 'seek knowledge that will enable us to deal with relevant problems and, ultimately, to find our way through the complexities of the social world' (Friedrichs and Kratochwil 2009: 726). Thus, the emphasis is not on producing or uncovering an objective 'truth' that is 'out there' in an independently existing world, but on gaining practically useful knowledge, which is always provisional and always historically contingent (Friedrichs and Kratochwil 2009:

713). Rather than following a positivist approach defining the concepts at the beginning of the research process and holding them constant, the conceptual framework and field of research were allowed to adapt throughout, with concepts adjusted throughout the research, to avoid ‘self-imposed conceptual blinders’ (Friedrichs and Kratochwil 2009: 717). This included the conceptual framework, following Wilkinson’s approach of using securitisation theory as a reference point rather than a definitive answer (2013b: 8). The concepts and questions were thus left open during the research process. Following this approach, it is also worth clarifying that this research is not a comparative project, as empirical generalisation is not the goal. The framework developed here is helpful for understanding my case studies, and may work in other concrete cases, but it is not a ‘general law’.

Following these methodological assumptions, the approach used in this research drew on critical constructivism, as this allowed me to ask the questions I was interested in and to analyse my puzzle. Pursuing critical social constructivist analysis involves committing to the following analytical principles:

1. What is understood as reality is socially constructed.
2. Constructions of reality reflect, enact and reify relations of power. In turn, certain agents or groups of agents play a privileged role in the production and reproduction of these realities.
3. A critical constructivist approach denaturalises dominant constructions, offers guidelines for the transformation of common sense, and *facilitates the imagining of alternative life-worlds*. It also problematises the conditions of its own claims; that is, a critical constructivism is also reflexive (Weldes et al. 1999: 13, emphasis added)

It is important to note that attempts to reimagine the world are necessarily always ‘partial and situated’ (Weldes et al. 1999: 21), but visualising an alternative is still a crucial part of advocating change. Critical constructivists do not focus on testing causal theories but rather on denaturalizing ‘dominant constructions, in part by revealing their connection to existing power relations’ (Finnemore and Sikkink 2001: 398). It also points to ‘potential

alternatives to prevailing structures' (Adler 2002: 102), which informs the normative agenda of this research. In this process it draws on critical theory, claiming 'an interest in change, and a capacity to foster change, that no conventional constructivist could make' (Hopf 1998: 184). Critical constructivism will be discussed in more detail in chapter two.

Lastly, a focus on the ethics of security implies a normative approach, as it necessitates the analyst both evaluating security and making some form of judgement about what security should or shouldn't be. In this sense, analysts are understood as 'active participants in the security discussion' (Hoogensen Gjørsv 2012: 851), rather than passive, or 'neutral' observers. While 'all enquiries into security are normative' (Fierke 2007: 3) as studying security necessarily involves making choices about what the world 'is', producing meaning (see also Crawford 1998: 134-5), I am going beyond this to 're-imagine' energy security based on existing alternative discourses. In this way I am explicitly exploring the potential for change, viewing language as unfixed and changeable. This process also draws on work by Doty and Trombetta, who illustrate the reflexive, two-way process of meaning-construction in contrast to top-down approaches like securitisation theory (Doty 1998; Trombetta 2008, 2010). Once meanings of security are opened up and recognised as being contested, security can be a site of '(even emancipatory) change' (McDonald 2008: 580). Thus illustrating that energy security both can be, and is being, thought, represented and practiced differently opens up potential for change. However, overall the aim here is to encourage wider theoretical and conceptual debate over the concept of energy security in a changing world, rather than to impose one account of energy security as the only viable approach. As such, the approach suggested here is an alternative, not a replacement, and certainly not the only alternative.

## **Structure of thesis**

This thesis is divided into six substantive chapters. The first three chapters deal with the literature, theory, research design and methods as follows. Chapter one presents a critical review of the existing energy security literature, divided into ‘logics’ of security. It starts with the dominant approach to energy security, discussing the literature following realist and liberal logics of security, as well as a ‘comprehensive’ logic combining the two. It then assesses the limited existing critical work on energy security. Chapter two outlines the conceptual framework underlying this thesis, starting with a discussion on methodology, before outlining critical constructivism as an approach. It then discusses the relationship between this research and securitisation theory, before discussing the Welsh School of security studies and normative agendas. Lastly, it discusses the emerging literature on the ethics/value of security, outlining where this approach differs from existing ones, suggesting that the value of security needs to be studied in context. Chapter three presents the research design and methods, starting with a discussion on research design followed by research methods divided into data collection and data analysis, addressing both interviews and virtual archives.

Chapters four, five and six present the empirical work undertaken. Chapter four presents an analysis of dominant energy security practices in the United States, beginning with a contextual discussion on the policy-making process and history of energy in the United States, before analysing energy security policy between 2004-2012 and the discourses which made those policies possible. Chapter five follows the same structure, presenting the analysis of dominant energy security discourse and practice in China. Chapter six starts by outlining the problems with current energy security discourses and policies, highlighting a link between energy and a logic of national security, characterising these discourses as

representing a largely negative notion of security. It then looks at existing, marginalised alternative constructions of energy security in the US and China, drawing out key themes. Finally, it uses this to discuss what a positive energy security might look like, and the implications for thinking, analysing, speaking and practicing energy security differently. As such, it places the research back into the debate on the value of security, presenting a framework for understanding the value of security in context and discussing the possibility of using existing discourses as a basis for developing more positive energy security practices.



## CHAPTER 1

**Energy security: the existing debate**

This research project approaches energy through the lens of security studies, looking at the relationship between energy and security. Consequently, this chapter surveys the existing literature on energy security in IR and security studies, from a critical perspective. It locates the vast majority of the existing literature as closely related with a traditional logic of security, and problematises this. It focuses on the academic literature, saving the policy literature for the empirical chapters, while recognising that the academic conceptualisation of energy security is itself influenced by policy debate and ‘academic and policy discourses are largely mutually constitutive’ (Shepherd 2008a: 10). As such the texts analysed here are in a sense both primary and secondary material (Hansen 2006: 83). The following section presents a brief discussion of security studies and explains what I mean by ‘logics’ of security, following Shepherd (2008b), and how this approach is used to understand the mainstream energy security literature. The rest of the chapter presents the existing energy security literature, starting with the mainstream literature. This section begins with a discussion on the literature on the concept of energy security, before discussing literature on energy security in the US and China, which is divided into subsections detailing the realist, liberal and comprehensive logics of energy security. The remainder of the chapter looks at the existing critical literature on energy security. The conclusion outlines the agenda for this research.

## **1.1 Energy, security studies and logics of security**

Traditional Security Studies emerged as a distinct sub-discipline of International Relations (IR) during the Cold War. The key focus of study is ‘the phenomenon of war’ – ultimately, ‘security studies assumes that conflict between states is always a possibility’ (Walt 1991: 212). Security is understood as protection from threats, usually of a military or geopolitical nature, and the referent object – the thing to be protected – is always the state. Security is deeply connected with a realist understanding of anarchy, making self-help the goal of foreign policy, as ‘each state must guarantee its own survival since no other will provide its security’ (Mearsheimer, 1990: 12). In orthodox security studies security is objective, ‘defined by state survival in the face of external threats’ - in these terms, ‘the object of security is the state and threats, and therefore insecurities, are objective, external, and fundamentally related to the use of power, and ultimately force’ (Shepherd and Weldes 2008: 530). Because of the historical primacy of the state, security has become closely linked with state sovereignty, and national security has become privileged in discussions about security (Walker 1990: 8). The state is presented as ‘inside’, and the thing to be protected, while the international is presented as anarchic, ‘outside’, and Other. This distinction has led security discourse to construct the state as the necessary focus of security and in need of protecting from an indefinite number of possible threats that exist in the anarchic realm, including Other states (Campbell 1998b). The privileging of the state in security discourse has worked to set limits on the security debate, and in particular limits on how ‘we have been able to think about more desirable alternatives’ (Walker 1990: 7), including the very meaning of security. Likewise, traditional security studies has used ‘disciplining practices’ (Krause 1998: 300; for example, see Walt 1991: 222) to delineate and limit the scope and subject of research in security studies.

Traditional security studies is distinguished by a divide between realist and liberal understandings of the international system. In their current more popular forms, neorealism and neoliberalism share an understanding of the international system as an anarchic realm. Moreover, ‘neorealists and neoliberals share generally similar assumptions about agents: states are the dominant actors in the system, and they define security in “self-interested” terms’ (Wendt 1992: 392). In their understanding of security and the international system, realists emphasise the need to secure the strategic *autonomy* of the state, resisting interdependence, whereas liberals assume and/or accept a relatively high degree of interdependence. As a result, liberal ideas about how to achieve (national) security take a different form in practice, emphasising international institutions and economic interdependence. This will be discussed in more detail in the following section. However, both remain methodologically and epistemologically positivist, viewing threats to security as objectively identifiable<sup>1</sup>.

Here, I use Shepherd’s ‘logics of security’<sup>2</sup> as an analytical framework for understanding the mainstream energy security literature, to highlight clear problems with the traditional concept of energy security and its ties to a very traditional understanding of security and the international system. Shepherd suggests that every security discourse is ‘organised around a particular logic of security’, highlighting the way ‘concepts are organised within specific discourses of security’ – ultimately,

each competing conceptualisation of security has a distinct primary focus, referent object and perspective on the arrangement of the international system... The ways in which these claims are

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<sup>1</sup> It is worth noting that liberalism has been more accepting of critical security studies, leading to the development of ‘human security’ which focuses on securing individuals (see Newman 2010) though this engagement is ignored in liberal analyses of energy security.

<sup>2</sup> It is necessary to recognise where I depart from Shepherd’s framework. While Shepherd states that ‘there is no single voice of author-ity, as there is no single truth of the matter/reality, thus I do not offer an alternative logic of security’ (Shepherd 2008a: 311) this research has an explicitly normative agenda that goes beyond critiquing the existing logics of energy security to rethink energy security and offer an alternative logic of security, which will be discussed further in the following chapter.

made, the assumptions that inform them, and the policy prescriptions that issue from them, are what I refer to as “logics of security” (Shepherd 2008b: 294)

The two central competing conceptualisations of energy security presented in the mainstream literature will here be referred to as the realist and liberal logics of energy security. The realist logic of security focuses largely on the state-level, with the state as the referent object of security and authors focusing on the role of energy in ‘national security’. Their understanding of the international system emphasises its anarchic nature as inevitably and irrevocably leading to competition between states. The liberal logic of security focuses on the state and/or the global level, with the state or global economy as the referent object of security. Their understanding of the international system similarly tends to emphasise anarchy, but with the assumption that this will not always lead to competition, and that states can overcome anarchy through cooperation. Economic interdependence is emphasised, together with economic competition. Meanwhile, in the realist logic, security equals strategic *autonomy*, and while the liberal logic assumes and/or accepts interdependence between states the realist logic resists interdependence. This focus on autonomy spurs competition and hinders cooperation.

These two logics dominate the current literature on energy security. In practice, their understandings of (energy) security and the appropriate referent objects of energy security are not that different; the claims they make about energy security are both strongly linked to a ‘highly conventional logic of security’ (Shepherd 2008b: 294). This has a direct impact on policy, as the particular understanding of energy security and the discourse used *makes very particular policy possible while excluding other policy choices*, in effect limiting the range of policy choices available. This will be discussed in more detail in chapter two. Energy security is here understood as socially and discursively constructed,

and as such this research problematises the understanding of energy security presented in the mainstream literature.

## 1.2 The mainstream approach to energy security<sup>3</sup>

### 1.2.1 *What is energy security?*

This section discusses the concept of ‘energy security’, before discussing literature on energy security specifically in the US and China, which is divided into subsections detailing the realist, liberal and comprehensive logics of energy security.

Energy security has traditionally been understood as the availability of secure supplies of energy at reasonable or affordable prices. Some branches of academia have attempted to expand this definition in recent years, particularly in environmental studies and energy technology or policy, with Sovacool finding 45 different definitions in the literature (Sovacool 2010a: 3-6)<sup>4</sup>, though the vast majority of these focus on the state. However, the emphasis in International Relations and Security Studies remains very orthodox, often returning to Yergin’s 1988 definition suggesting that ‘the objective of energy security is to assure adequate, reliable supplies of energy at reasonable prices and in ways that do not

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<sup>3</sup> The literature presented here is necessarily selective and certainly does not represent an exhaustive list. The emphasis is on key works in IR (though some references are made to related fields where relevant), which cover the concept of energy security as well as energy security in the United States and China. Because the US and China are the two largest net oil importers globally, much of the energy security literature centres on these cases anyway. Likewise, their energy security strategies have implications for each other (see Lieberthal and Herberg 2006: 6).

<sup>4</sup> This is more common in environmental studies and energy technology/policy work - see, for example Kruyt et al (2009) and the Asia Pacific Energy Research Centre (APEREC 2007) who suggest a broadened definition including 4 A’s: availability (geological), accessibility (geopolitical), affordability (economical), and acceptability (environmental/societal). Meanwhile, the IR literature focuses largely on the middle two – geopolitical accessibility and affordability – often overlooking geological availability and relying on low standards of environmental/social acceptability. Kruyt et al. also note that while the literature shows a wide range of potential security of supply indicators, but most are not actually used in policy-making, where emphasis remains on price and import dependency - ‘governments see security of supply as a major objective for their energy policy’ (2009). Other ‘broadeners’ include Helm (2002) and Winzer (2012) though the latter returns to the more traditional security of supply. In broadened discussions of energy security, it can include anything from nuclear proliferation to environmental protection.

jeopardize major national values and objectives' (1988: 111). Historically, the focus has been narrow, stressing security of oil supply. This reflects the fact that 'the current energy security system was created in response to the 1973 Arab oil embargo...[and thus] focuses primarily on how to handle any disruption of oil supplies from producing countries' (Yergin 2006). Even today the International Energy Agency defines energy security as 'the uninterrupted availability of energy sources at an affordable price' (IEA 2013b), and this narrow notion of energy security remains key in the academic literature (Lee 2005: 266; Xu 2006: 43; Bielecki 2002), as does the focus on security of oil supply (Bielecki 2002: 237; Vivoda 2009; also IEA 2013b). The definition itself remains largely 'unquestioned' in the mainstream literature on energy security (Dannreuther 2010: 145). Those who do suggest that the current definition of energy security is problematic tend to focus on its bias towards the developed, energy importing world, suggesting it be 'expanded to include the protection of the entire energy supply chain and infrastructure' (Yergin 2006; see also Dannreuther 2010).

Energy has generally been considered a security issue (at least for importing states) since the 1970s oil crises, after which Treverton argued that 'there can now be no doubt that access to and use of energy have clear bearing on the security of nations' (1980: 1). What this means in practice, however, is rarely questioned. Deese suggests that energy security has both internal (domestic) and external components: 'it is the external component – energy imports – that poses the most immediate problems for national security' (1979: 140). Indeed, discussions of energy as a security issue often relate back to foreign policy, with suggestions that the concept itself has a traditional security focus (Mulligan 2011: 634). States play a central and arguably increasing role in achieving energy security, with

national oil companies and state intervention growing in importance<sup>5</sup>. We are said to be living in a ‘fossil fuel age’, characterised by the continual struggle by states to secure supplies of scarce resources (Yergin 2011b: 4). Many discussions also emphasise the economic dimension of energy security, suggesting that energy is a security issue as economies rely on secure and stable supplies to function (Kruyt et al. 2009). Moreover, with increasing emphasis on the idea of ‘peak oil’, energy security is, if possible, becoming even more entrenched as a national and economic security priority. We are in what is said to be the start of a ‘new geopolitics of energy’ (Klare 2008: 6), where energy is ‘an issue of “high politics”’ (Lieberthal and Herberg 2006: 13). Ultimately, ‘energy and its challenges will be defining for our future’ (Yergin 2011b: 8).

However, even in the mainstream literature, the relationship between energy and security is not straightforward:

devising a strategy and thinking about energy as a security problem is not as simple as it first seems...energy security is only part of national security; in some circumstances we would risk energy supplies for other values we consider part of our national security (Nye 1981: 6)

Thus, while it is often high on the national security agenda, energy remains one of several issues prioritised. Likewise, energy security has slightly different emphases in the United States and China. While both states emphasise security of supply at stable prices, the United States is historically more dependent on oil (Rutledge 2006), while China only became a net oil importer in 1993 and still remains heavily reliant on domestic coal. While Xu has asserted that this makes China more focused on domestic supply than overseas supply (2006), China’s huge increases in energy consumption, together with the international dimension of China’s energy policy suggests overseas supply – particularly

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<sup>5</sup> In the 1970s international oil companies dominated the oil market, but by 2007 ‘state controlled national oil companies accounted for 52% of global oil production and held 88% of total reserves’ (Bradshaw 2010: 276).

of oil – is increasingly important (see also Zhang 2003). Meanwhile, as an industrialising country, Chinese notions of energy security also emphasise the importance of energy supply for economic and social development (Zha 2006b: 3). However, while there are some differences mainstream Chinese thinking on energy security shares key characteristics with Western traditional thinking on energy security (Downs 2004: 23).

The existing and growing body of literature on energy security analyses the growing ‘energy threat’ using discourse framed around logics of realist/liberal (energy) security which present ‘two diverging accounts of the causes of energy insecurity and the means to overcome them’, reflecting opposing traditions in International Political Economy (Dannreuther 2010: 145) and Security Studies. It is important to note that these two logics are extreme ends of the spectrum, and there are many nuances and disagreements within the two central groupings presented here. It is a subjective distinction which simplifies the literature, but for the purpose of this analysis it is a helpful one, as it centres on their understanding of energy *security* and the logics of (energy) security the discourses they present centre around. Ultimately, the mainstream energy security literature remains ‘state-centric, supply-side biased, overwhelmingly focused on oil and tends to equate security with self-sufficiency’ (Downs 2004: 23). There is agreement between authors that security of supply is a national security issue, but they differ in terms of how to solve this. This next section maps the ‘mainstream’ academic discourses on energy security, looking at this literature according to the prescribed logic of security, analysing how they understand threat and the referent object of security. It also looks at where these two discourses overlap, and the ‘comprehensive’ approach which aims to bring the two logics together. The emphasis here is on how energy security is represented in the academic literature,



asking, what does it mean to be ‘secure’ in energy terms, according to the dominant literature?

### *1.2.2 The realist logic: securing the autonomous state*

What is here referred to as the realist logic has elsewhere been referred to as the ‘strategic approach’ to ensuring energy security. Here energy security is ensured by controlling supplies via state owned companies, focusing on energy independence/self-sufficiency, political links with, and investment in, energy-exporting states, and using military force (Andrews-Speed 2004: 340). Dannreuther describes this approach in the literature as the ‘neomercantilist and realist tradition, which sees the international struggle for energy security as a zero-sum game’ (2010: 145). Both American and Chinese policy approaches to energy security have been placed in this category by various authors (see Andrews-Speed 2004: 343), though there is little agreement – both states have also been characterised as following a liberal logic. There is a large body of literature on resource wars which feeds into the ominous predictions of the realist logic of energy security (see for example Klare 2002). The referent object of energy security here is always the state, and the state is the central actor in an anarchic world with scarce resources: ‘we are seeking more, but finding less’ (Klare 2008: 39) – which inevitably leads to zero-sum competition. The literature presents a world where the strategy of self-interested states competing to ensure their autonomy and ultimately survival trumps the power of the international market and international cooperation. This section will now discuss some key authors who present energy security in terms of the realist logic, looking at how they represent energy security, what claims they make and upon what assumptions they base these claims and their claims about the international system.

Realist works on energy security in the US and China present energy as a national security issue, and tend to focus on the geopolitical aspect of energy security. Energy is presented as a key part of foreign policy, which should be pursued to advance national security interests (Kalicki and Goldwyn 2005). The state is the central actor considered, and the object to be secured by a constant energy supply at a stable price. Vitrally, for realists securing the state involves ensuring strategic autonomy in the international system, thus security necessitates ‘reducing vulnerability to being subject to the power of others’ (Lee 2005: 289). Indeed, it is central to discussions of power: ‘ever since the industrial Revolution, energy and the need to secure its supply have been fundamental to any position of power in the world’ (Schlesinger 2005: xiii). The importance of strategy and military is closely linked to the representation of energy security:

traditional energy security concern is about the supply of and demand for energy...A state is said to be insecure if it has to rely on external sources of strategic materials which contribute to its ‘war potential’ or if the supply of the strategic materials is under threat (Lee 2005: 266)

Likewise, there is ‘mounting pressure on *national leaders* to satisfy their *countries’* energy needs’ at any cost, financial or military (Klare 2008: 8, emphasis added). Because of mistrust and suspicion in US-China relations energy security is ‘national security’, not friendly competition (US Energy Secretary Abraham, Boekestein and Henderson 2005: 17). Even when analysts include aspects of economic security (see Lee 2005) it is justified purely in national security terms, and the referent object remains the state. The security of the autonomous state is central, and in turn necessitates ‘a stable and secure supply of oil’ (Manning 2000a: 4). Following this, the US is said to need a ‘national energy strategy of autonomy and integrity’ (Klare 2005: 180-1). Ultimately, energy security is about ensuring secure access to the energy resources ‘required for the continued development of national power’ (Kalicki and Goldwyn 2005: 9).

Authors in the realist logic tend to focus on the role of foreign policy and foreign oil imports in ensuring state energy security (see Boekestein and Henderson 2005: 58; Kalicki and Goldwyn 2005). Energy security is said to be increasingly important as a foreign policy issue in US-China relations because of growing energy needs (Boekestein and Henderson 2005: 28). Likewise ‘procurement of oil is deemed a national security issue in China and government policy is driven by strategic measures’, through the three main state-owned energy companies (CNOOC, CNPC and Sinopec) (Boekestein and Henderson 2005: 35). The autonomous state and national security are the central organising principles around which the realist logic represents energy security:

Chinese oil executives are told to put their country’s oil security above the economics of their business. US Generals are told to expand their bases in order to project power into regions containing United States’ energy interests. *Clearly, energy security is national security* (Boekestein and Henderson 2005: 80, emphasis added)

The realist logic shows claims based on very particular assumptions and principles, including the importance of strategy and geopolitics, and the increasing role of resource nationalism. The international system is characterised by a ‘resource race’; ‘a voracious, zero-sum contest that, if allowed to continue along present paths, can only lead to conflict among the major powers’ (Klare, 2008: 30). Global dynamics have changed – before nations cooperated more over energy security, today it is increasingly competitive (Kalicki and Goldwyn 2005: 5). The energy resource game is a zero-sum game, where a growing China needs increasing energy supplies which can only be satisfied ‘at the expense of other energy-starved nations’ (Klare 2008: 12). Following this logic, ‘every barrel of oil China buys in the Americas means one less barrel available for the US’ (Luft 2005). The possibility of disrupted supply is continually highlighted as a geostrategic vulnerability (Samuelson 2011). In response, the US and China are said to be adopting increasingly strategic energy security policies; ‘[f]or the first time, China is pursuing its energy security

policy outside of its borders' (Boekestein and Henderson 2005: 31). These authors point to China's 'going-out' strategy, adopted in 2002, encouraging its National Oil Companies (NOCs) 'to build up secure supplies abroad through purchasing equity shares in overseas markets, exploring and drilling abroad, constructing refineries, and building pipelines to Siberia and Central Asia' (Leverett and Bader 2005: 193). China's energy policy has taken a bilateral, state-centred focus, and the state uses 'regular high-level official visits' to support its energy companies in the Gulf (Leverett and Bader 2005: 192). Overall, China's oil security strategy aims to ensure autonomy by minimising vulnerability 'to American power' (Lee 2005: 269). In the US, with economic decline the military plays an increasingly important role in protecting energy foreign policy objectives (Boekestein and Henderson 2005: 21).

The realist logic also notes increasing state involvement in energy policy, in the rise of NOCs, resource nationalism and neo-mercantilism, not just from China and other developing states but also in the West, particularly in the US (Klare 2008: 19-24). The Chinese leadership is said to attempt to ensure strategic autonomy by focusing on securing 'effective ownership of critical hydrocarbon resources' instead of relying on the market (Leverett and Bader 2005: 188); but likewise, successive American administrations have assisted US firms seeking African energy assets (Klare 2008: 158). The need to integrate energy security into US political-military policy is emphasised (Nye 1981: 7). Leaders increasingly see energy as a 'zero-sum contest – one in which a gain for one country almost always represents a loss for others' (Klare 2008: 211). This is accompanied by alarmist discourses of danger emphasising the likelihood of resource wars (see for example Klare 2002). Manning points to the energy industry as 'the apocalypse industry' (2000a: 1).

In terms of their view of the international system, this literature presents a world characterized by competition and inevitable and perpetual possibility of conflict. Changing energy dynamics are said to have strategic geopolitical consequences (Burrows and Treverton 2007). Decreasing supplies are presented as affecting our understanding of power and influence in the international system (Klare 2008: 14). Consequently, in the near future ‘the struggle over energy...[will] override all other considerations’ (Klare, 2008: 7). In this world oil will no longer be largely a commodity traded on the international market, but will increasingly be in the hands of ‘senior government and military officials’ (Klare 2008: 7). This ‘world of rising powers and shrinking resources is destined to produce intense competition’ (Klare 2008: 7). Even with diversification and increasing renewables, ‘competition for global oil supplies will intensify...[w]e cannot escape that reality’ (Samuelson 2011). The US and China will continue to compete over energy in Central Asia and the Middle East and tension over energy issues will be amplified by their respective domestic political situations (Boekestein and Henderson 2005: 8). The energy security strategies of both states are said to threaten each other (Boekestein and Henderson 2005: 6), and China’s increasing energy drive already causes bilateral tension (Leverett and Bader 2005: 196). Ultimately competition between the two states over energy resources is said to be increasingly likely (Lee 2005: 279). Conflict over energy is increasingly seen as a possibility<sup>6</sup>: ‘The dragon is thirsty and the eagle is hungry – but it will be difficult to satisfy both’ (Boekestein and Henderson 2005: 84).

However, there are some authors who while presenting a broadly realist logic, argue that cooperation is possible. Friedberg refers to these authors as ‘optimistic realists’ (2005).

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<sup>6</sup> Boekestein and Henderson point to Caverly, from the US Department of energy, as saying that ‘geopolitically, this [energy security] could soon bring United States and Chinese interests into conflict’ (Caverly 2002, in Boekestein and Henderson 2005: 84).

Policy recommendations suggest that the US initiate cooperation, though it may not be successful (Leverett and Bader 2005: 197). There is a need for dialogue between the two to avoid ‘a gradually escalating clash of interests between the United States and China in the Middle East’ (Leverett and Bader 2005: 199), and markets could be a solution (Manning 2000b: 73). There is also an element of (state) choice: ‘whether this prospect poses a security threat depends to a considerable degree on whether China elects to view energy security geostrategically or geoeconomically’ (Manning 2000b: 82). Meanwhile, the only way to avoid ‘inevitable’ conflict between US and China over energy would be previously unprecedented cooperation and partnership (Klare 2008: 245). If either or both state/s ‘become convinced that their counterparts are implacably hostile and that conflict is therefore inevitable, they will no doubt act in ways that make it far more likely’ (Friedberg 2005: 42). As a result, ‘it is likely that oil wars, instead of oil, are in the pipeline. Possibilities of bilateral or multilateral energy cooperation are, in contrast, rather remote’ (Lee 2005: 289).

The realist logic represents energy as a national security issue, and the referent object to be secured in energy terms is always the state. For the state to be secure, strategic autonomy is necessary, which spurs competition and hinders cooperation. Energy is increasingly considered a foreign policy issue, and energy security policy is characterised by geostrategic concerns, and increasingly, resource nationalism. These claims are underpinned by an assumption that the international system is an anarchic realm characterised by zero-sum competition between autonomous states over scarce resources. Cooperation is possible in some circumstances, and often considered desirable, but unlikely. Threats to (state) energy security are conceptualised in purely objective, strategic

terms as supply disruptions or other forms of lack of access to energy supplies, or price hikes.

### ***1.2.3 The liberal logic: securing the economy and interdependence***

The liberal logic has also been referred to as the ‘market’ approach to energy security, and derives from the ‘liberal political economy tradition’ (Dannreuther 2010: 145). Rather than political-military solutions or independence, it focuses on liberalizing energy markets, integration and interdependence as the solution to energy security (Andrews-Speed 2004: 340). It is a specific, economic form of neoliberalism that is emphasised. The international system is generally still seen as anarchic, but cooperation is deemed not only possible but likely, as the world is becoming increasingly interdependent. Vitaly, here energy security ‘is *not a zero-sum effort*; if appropriate policies are instituted, the improvement of one country’s energy security need not be at the expense of other countries’ (Gault 2006: 9, emphasis added). The referent object of energy security in the liberal logic is always the economy, but it can vary from securing the national economy or economic growth of particular states through economic integration, to focusing on securing the stability of the global economy (sometimes as a means to secure the energy security of states). Again, as with the realist logic, both Chinese and American strategies are sometimes seen in the terms of the liberal logic (for example, see Andrews-Speed 2004: 339).

The liberal logic represents energy security again as reliable and adequate supply of energy at ‘reasonable prices’ (Bielecki 2002: 237). The emphasis is largely on liberal economics and market integration as a solution to energy security. Energy security is understood as a stable global energy/oil market, with one article by *the Economist* during the early stages of the Arab Spring stating that ‘to gauge the risks today you need to answer three

questions. How vulnerable is the oil market to an interruption in supply? How sensitive is the *world economy* to oil-price spikes? And how well can policymakers cope with a shock if the worst happens?’ (Economist 2011: emphasis added). Again, the referent object of energy security is clearly the world economy, and economic policy the way to protect it: ‘[w]hat can central banks do to protect the economy?’ (Economist 2011). Instability during the Arab Spring was represented as a threat to energy security, with little discussion of the impact of oil security strategies, including economic competition over oil, on the security of individuals and the environment. Some work in the liberal logic of energy security moves completely above the state-level of analysis, emphasising globalisation and removing the state as a referent object of security:

There is only one oil market, a complex and worldwide system that moves and consumes about 86 million barrels of oil every day. *For all consumers, security resides in the stability of this market.* Secession is not an option (Yergin 2006: emphasis added)

Here the market itself is given agency, moving and consuming oil. It is this market that is the object to be secured through various energy security measures. Likewise, individuals only exist as consumers.

Some authors take a macroeconomic approach to energy security, emphasising the ‘impacts of high energy prices and the danger of economic losses resulting from potential shortfalls in energy supply’ (Bielecki 2002: 237). Bielecki thus focuses on the security of oil markets, on supply and demand, prices, and the ‘supply security of IEA states’ (2002: 238). Following this, ‘the meaning of reliable and adequate supply is rather straightforward: it simply means uninterrupted supply that fully meets the needs of the global economy...[t]he interpretation of reasonable prices is somewhat less clear...[i]n general, however, it means that prices are cost-based and determined by the market based on supply/demand balances’ (2002: 237). However, despite the emphasis on securing the



global economy, here it is secured ultimately in order to secure states – it is ‘consuming countries’ that are ultimately ‘vulnerable’ – and states, together with industry, are key actors to minimise risks of supply disruptions and their possible negative impact on the global economy (Bielecki 2002: 236-49). As such, while the global market or economy remains a core referent object, the understanding of security remains state-centric. Similarly, Lieberthal and Herberg dismiss the link between equity oil and energy security (used largely in the realist logic) as ‘based upon a pre-1970 understanding of global oil markets—an era before the creation of today’s dynamic, flexible global commercial oil markets’ (2006: 21). In the past five years ‘*no major economy* has suffered a physical shortage of oil—despite severe oil price increases and a rapid succession of geopolitical and weather-related supply disruptions’, though unfortunately US and Chinese thinkers do not seem to understand this (Lieberthal and Herberg 2006: 21, emphasis added). Again, the focus is on the security of state oil supply.

Authors in the liberal logic present international markets and multilateral initiatives or institutions as the solution to energy insecurity (Yergin 2006). Overall, it is contended that market liberalization will help deal with energy security threats, and

*markets need to be recognized as a source of security in themselves...Today, large, flexible, and well-functioning energy markets provide security by absorbing shocks and allowing supply and demand to respond more quickly and with greater ingenuity than a controlled system could (Yergin 2006: emphasis added)*

In effect, markets themselves are a source of energy security, and with globalization the ‘share of energy traded internationally is increasing’ (Gault 2006: 3). Overall, ‘energy trade has served the world well’ (Verrastro and Ladislaw 2007: 99), and ‘to maintain energy security countries must diversify their suppliers of energy, create security margins, and remain integrated into a global system of energy consumption’ (Yergin 2006). In other words, they must integrate into the neoliberal energy market to ensure security. This kind

of thinking is institutionalised, with International Energy Agency energy security indicators showing ‘firm trust in the functioning of (liberalised) energy markets’, while ‘dynamics of other aspects of SOS [security of supply], such as depletion, are ignored’ (Kruyt et al. 2009). The threat of energy insecurity is downplayed, in comparison to the alarmist peak oil discourse seen in the realist logic – we are told that the present condition does not represent an energy crisis (Bielecki 2002: 249). Equity investment by NOCs is not considered a threat as ‘all consumers will benefit from increases in global production capacity’ (Gault 2006: 8; see also Yergin 2006), and many authors point to a need to engage China ‘in the global network of trade and investment’ (Yergin 2006). Moreover, China’s NOCs are often ‘far more market driven and corporate centred than a superficial understanding of the go-out strategy might suggest’ (Lieberthal and Herberg 2006: 18). More recently, Chinese analysts increasingly promote ‘a more positive approach to international markets and institutions’, which is considered unequivocally positive (Kennedy 2010: 138).

As a result, liberals argue that states cannot achieve security through energy independence, and interdependence and cooperation over energy is emphasised. The liberal logic’s representation of energy security is underpinned by the assumption that energy independence or autonomy is not possible in today’s world and a belief in the ‘pacific benefits of liberal interdependence’ (Dannreuther 2010: 146). There is a need for ‘national, regional, and international energy strategies that foster cooperation on energy issues’ (Pascual and Zambetakis 2009: 32). Cooperation, not competition, is presented as the natural response to energy security concerns, as the world becomes increasingly ‘energy-interdependent’ (Verrastro and Ladislav 2007: 95). Thus, growing Chinese energy needs and influence ‘should encourage both China and the United States to begin to develop

mechanisms for managing potential disagreements' and shared interests will likely lead to cooperation (Lieberthal and Herberg 2006: 24). Even today, there are increasing signs of such bilateral cooperation over energy, though largely below policy level (Lieberthal and Herberg 2006: 31). Multilateral institutions and initiatives are also considered as a solution to energy insecurity. Multilateral initiatives are said to enhance cooperation and reduce mistrust (Lieberthal and Herberg 2006: 31). The US and China both have an interest in preserving price stability and supply security, both of which can be helped by increased bilateral and multilateral cooperation (Lieberthal and Herberg 2006: 42). China's energy development is hoped to move towards increased reliance on the international energy market for energy resources, 'willingness to cooperate with other consumers to increase price stability', as well as energy conservation and efficiency measures (Lieberthal and Herberg 2006: 28-29). This also relates to the global energy governance literature (Florini and Sovacool 2009) which emphasises the need for institutionalised global energy governance with a working energy agency regulating the global energy market (Helm 2002: 184).

The liberal logic of energy security presents an international system that is increasingly globalised and interdependent, while anarchy is still a factor. Overall states are more likely to cooperate than compete over energy resources as it is in their interest to do so, though economic competition remains a key principle. While 'interdependence does not guarantee cooperation, it does provide more opportunities and incentives for cooperation than conflict' (Xu 2006: 266). The US and China have common interests as the world's largest energy consumers and it is 'in the best interests of both countries to try to understand each other's energy insecurities and find new ways to work toward cooperative outcomes' (Lieberthal and Herberg 2006: 10). As a result of growing interdependence and

integration, and the growing share of developing states in oil demand, 'it is becoming necessary to develop a *global approach* to long-term oil and energy security' (Bielecki 2002: 246, emphasis added).

Overall, authors in the liberal logic represent energy security in economic and cooperative terms, focusing on securing either the global economy/oil market or national economies. The emphasis is on neoliberal macro-economics, with liberalisation of markets and multilateral initiatives as solutions to energy security issues. Problematically, it rarely recognises the limitations of relying on markets, as 'energy security is a public good which is not properly valued by the market and the benefits of which are available equally to those who pay for it and to those who do not...[c]onsequently, the market may tend to produce a level of energy security that is less than optimal from the society's point of view' (Bielecki 2002: 236). Likewise, as noted by Kruyt et al., even the IEA's indicators for energy security fail to note depleting resources (2009). The international system is presented as one characterised by globalisation and increasing interdependence, with cooperation over energy resources as the natural response to energy insecurity. Threats are presented in objective terms, focusing on securing supply and price stability.

The majority of the mainstream literature on energy security falls in either the realist or liberal logics of security, or somewhere on the spectrum between the two (see below for comprehensive approach). While they differ in many ways, they share a similar understanding of the organisation of the international system and the objects worthy of study in international relations. They both present an anarchic international system, and often focus on the state. State competition is also privileged in both discourses, whether strategic or economic. They represent energy security in the same way, focusing on

security of supply and stability of price. Both understand security threats as ‘objective’ and ‘external’, and do not consider how threats become constructed as such through discourse, leaving no possibility for change. This places clear limits on their analysis. By focusing on the state/economy/market as the referent object of security, in some cases assuming that this will provide security for individuals and the environment, in effect they fail to secure individual human beings and the environment by perpetuating an economic system driven by increasing consumption and competition over energy. They do not question the relevance of the accepted definition of energy security as a focus on security of supply and stable price. Moreover, the realist logic has no normative agenda and works as a self-fulfilling prophecy perpetuating endless security dilemmas, which serves to reproduce the world as it is with no possibility of theorising change.

However, for the purpose of this thesis the problems of the liberal logic of energy security are somewhat less clear. Liberal strategies for dealing with (state) energy (in)security emphasise cooperation between states, liberalising energy markets and multilateral initiatives to secure economies. While anarchy is still considered a central organising principle, the liberal logic views the international realm as interdependent, and cooperation as not just possible, but likely. While the liberal logic of energy security may appear less problematic, the continued emphasis on states as central actors ultimately gives states preferential treatment when it comes to *securing* and being secured – even in the liberal logic, individuals and the environment are ignored as potential referents of energy security. Threats are still considered objective, and the focus is still on securing supply and price stability. Securing (in energy terms) the global market/economy or national economies again does not necessarily lead to environmental or individual security. Problematically, ‘fossil fuels are cheap and relatively easily deployed sources of energy, largely due to

market failures that fail to take account of their social and environmental externalities' (Vanderheiden 2011: 609). The emphasis on economic competition over fossil fuels drives up consumption and is not sustainable. When liberal understandings of energy security focus on the global level they emphasise securing the international economy and current standards of consumption, which is not sustainable for people or planet. This is not to say that securing energy markets is just a negative – collapsed energy markets would clearly also cause human insecurity – but that markets should not be the sole focus of energy security policy. The emphasis liberal literature on energy security has on securing economies effectively works to marginalise energy security debates on resource limitation, environmental sustainability and human inequality and insecurity. As a result, while the liberal logic on energy security may assume or even promote cooperation and interdependence, this does not result in secure individuals or a secure environment.

#### ***1.2.4 The comprehensive approach: still securing the state or the economy***

Some authors mix the realist and liberal logics. This is increasingly referred to as a 'comprehensive approach' (Tunsjø 2010: 28). The state and/or the national/global economy is/are still the referent/s of security, and the claims made about the international system and the assumptions that underpin these claims remain the same. Threats to energy security are still objectively identified. These authors still work broadly within a traditional understanding of security, so for the purposes of this analysis I have here included them under the mainstream energy security literature.

The most common approach in the comprehensive literature is describing the current situation as energy competition between the US and China, but arguing that cooperation and integration is possible and more likely in the future and thus will provide energy

security. '[i]nterstate competition is natural, of course', but there is still room for cooperation (Zweig and Bi 2005: 27). Jaffe and Lewis state that 'being a net oil-importer should, logically, bring China's interests closer to those of the oil-dependent West' (Jaffe and Lewis 2002: 115). Energy cooperation has many advantages, and could encourage a more constructive relationship between the US and China (Jaffe and Lewis 2002: 116). Integration and multilateral institutions are presented as an 'alternative strategy for energy security' for China (Jaffe and Lewis 2002: 128). Chinese analysts are said to focus on 'oil price volatility and physical supply disruptions to be the main threats to energy security', but more reliance on global markets are the solution to China's energy insecurity issues (Downs 2004: 31 and 40). Following this, 'China must now view energy security in terms of economic threats and market solutions rather than military threats and diplomatic responses' (Zha 2006a: 181). In US-China relations, energy could well lead to competition and prospects for 'more serious clashes are high' – as a result, they should improve energy cooperation (Zha and Hu 2007: 104).

Tunsjø argues that in practice, 'energy security combines market and strategic aspects', and most states combine the two in their energy security strategies (2010: 26). Moreover, the traditional literature 'does not provide the tools needed to examine the tension and balance between market and strategic approaches' (Tunsjø 2010: 28). In practice, 'China hedges against adverse consequences of *both* strategic *and* a market approaches' (Tunsjø 2010: 29-30). Again, however, the focus is on securing states/markets and this is never questioned. Likewise there is no normative agenda and no attempt to understand how these policy choices are made possible through discourse. Some also attempt to provide a more comprehensive approach to energy security by quantifying the concept itself to measure it with indicators, developing cross-country comparisons based on this (see Jansen and

Seebregts 2010; Sovacool and Brown 2010). However, this does not explain how particular policies become possible, as it just examines how effective they are at fulfilling specific criteria.

While the comprehensive approach presents an interesting analysis of energy security issues, and a more balanced assessment than the realist/liberal logics, it still does not move beyond a traditional understanding of security, or question how the policies analysed are made possible. It ignores the role of discourse and fails to progress beyond the traditional paradigms, ignoring the security of human beings and their need for a secure and stable climate and environment. Effectively, basing energy security policy on a conventional logic of security reproduces a particular understanding of energy security that privileges national security, in effect enabling policies that ignore individuals and environmental concerns, and limiting energy security policy options to those that work to secure the state and national/global economy. The meaning of energy security and threats to energy security are presented as objectively identifiable. The finite nature of conventional energy resources is ignored and competition (whether in economic or resource terms) encouraged, spurring consumption and resource over-use. Throughout, the focus remains on fossil fuels, particularly oil security – though occasionally this is expanded to include gas (Kalicki and Goldwyn 2005: 10). The mainstream understanding of energy security effectively reproduces a world where states are unproblematically assumed to be the necessary referent object of security. There is therefore a need for analyses of energy security which problematise the concept of energy security.



### **1.3 Problematising energy security**

In the late 1980s and early 1990s security studies saw the emergence of a new subfield of literature that questioned the underlying assumptions of traditional security studies, commonly referred to as ‘critical security studies’. Critical security studies scholars critiqued the way in which ‘both the object of security (what is to be secured) and the means for studying it are treated as largely given and self-evident’ in conventional security studies (Krause and Williams 1997: ix). This will be discussed in more detail in the next chapter. As part of a wider critical security studies agenda, this thesis questions the way the vast majority of literature on energy security relies on a traditional logic of security, suggesting that this understanding of security is not only insufficient, but likely to cause insecurity for states, individuals and the environment in which they live. The way that energy security is constructed is paradoxically making the world less secure, even in orthodox terms. Consequently, there is a need for energy security studies to recognise and engage with the contributions of critical security studies to develop a more critical energy security studies that recognises the problematic nature of the mainstream approaches to energy security and moves beyond securing states and markets.

Energy security studies as a field has not only largely escaped critical scrutiny but actually become more closely tied to traditional understandings of security – today ‘energy security is national security’ (Boekestein and Henderson 2005: 80). This is even more so the case with increasing emphasis on peak oil (Dannreuther 2010; Mulligan 2011) coupled with increasing demand from emerging economies including China and India. This link between energy and national security is problematic, as it is accompanied by a logic of security organised around the principle of anarchy, where threats and insecurity are ‘inevitable’, justifying particular security behaviours and making it possible for scholars to

ignore even the possibility that energy security and energy security threats are constructed and therefore unable to conceptualise change – or even the possibility or desirability of change – to the status quo (Shepherd 2008a: 62). In contrast, this thesis argues that threats are ‘fundamentally interpretive’ (Shepherd and Weldes 2008: 532) and socially constructed through discourse and practice. This does not mean that threats are not ‘real’<sup>7</sup>, but that to become understood as threats they need to be represented and constructed as such.

Likewise, the concept of security is itself ‘intersubjective and socially constructed’ (Buzan et al. 1998: 31). The referent of security is essential to the meaning of the concept itself: ‘[t]o have any meaning, *security* necessarily presupposes something to be secured’ (Krause and Williams 1997: ix). This leaves us with two questions: what thing or body needs to be secured; and what is the danger or threat? In the mainstream literature on energy security threats are unstable supplies or prices. In both cases these threats are presented as threatening the state, whether in terms of its economic and/or its political-military survival. Once a state defines something as a ‘threat’ to security this ‘enables certain political processes and policies’ (Shepherd and Weldes 2008: 534). Policy in/security discourses, or ‘discourses of danger’ (Campbell 1998b: 130), are closely tied to conventional understandings of security; ultimately ‘these links serve to prescribe certain policy responses and proscribe others’ (Shepherd and Weldes 2008: 536).

In this way, the state remains privileged as the referent object of security, which is justified in terms of states ‘supposedly providing citizens with physical safety’ within the state itself

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<sup>7</sup> External constraint on change (power) is not about whether or not threats are real, but about ‘how that which occurs became possible and is made meaningful both in theory and in practice’, which allows ‘analysis of the processes through which meaning is made and therefore ‘reality’ is (re)produced’ (Shepherd 2008a: 73).

(Dalby 1997: 8). However, if we look beyond the state as the object to be secured, both to individuals and to the environment, traditional ‘national security practices’ cannot always secure (Dalby 1997: 15). Dannreuther highlights this particularly well, both noting that energy and climate security are ‘potentially incompatible’, and pointing to human security as ‘one of the most neglected dimensions of the energy security debate’ (2010: 147). Ultimately, energy security as the mainstream literature presents it is incompatible with a secure and stable environment and climate, as it serves to drive up competition for fossil fuels, contributing to climate change. Meanwhile, this jeopardises the future of the planet that human beings depend on to survive. As a result there is a need to problematise the state-centric nature of energy security, and its ‘geographical definitions of proximate safety and external threat’ (Dalby 2010: 54) as inadequate for conceptualising energy security. Vitaly, ‘what it is that should be rendered secure is an essential component of any discussion on security’ (Dalby 1997: 22).

As demonstrated the mainstream literature on energy security neglects to analyse how energy security is represented and constructed, making very particular policies possible and excluding other policy options. Overall the mainstream energy security debate has not incorporated or engaged with critical security studies: ‘energy has always been considered a security issue, even if as a ‘non-traditional’ issue compared with military security’ (Simpson 2013: 251). Despite this, there is a small and diverse emerging critical literature on energy security. Some of these authors focus on broadening understandings of energy security, while others analyse the concept itself. This is where this research fits into the energy security literature. Some of these approaches draw on various critical security literatures, while others draw on environmentalist approaches. Overall, however, ‘abundant analyses of pipeline politics stand in stark contrast to the very few attempts to

make sense of energy security conceptually' (Ciută 2010: 124). Critical work is much more common in the field of environmental security compared to energy security, which is more dominated by a traditional understanding of security (Trombetta 2008)<sup>8</sup>. Developing the critical literature on energy security is essential to problematise entrenched traditional understandings of energy security, highlighting what they overlook. This section groups critical literature on energy security into three sub-sections, beginning with work that discusses the constructed nature of energy security and the relationship between energy and national security, followed by conceptual critiques of 'energy security', and lastly, critiques that argue in favour of broadening the meaning and referent of energy security. Overall, the critical literature presents a range of interrelated concerns; the division by focus here is for analytical purposes.

### ***1.3.1 Constructing energy security and national security***

Existing critiques that note the relationship between energy and national security often come from environmental security studies, the concerns of which are closely related to energy and where critical work is much more common (for example, see Vanderheiden 2011). In *The meaning of environmental security*, Barnett notes that the current notion of energy security as security of supply at stable prices stems from the oil crises era. As a result, 'energy security is the theory and practice of securing energy for the nation state' (2001: 34). However, once the starting point is not national security but environmental security, it becomes clear that 'the problem of energy security is not only the need to alleviate scarcity, however, but also concerns the ecological impact of burning fossil fuels' (Barnett 2001: 35). Following this, the solution is not maximising fossil fuel supply, but rather 'clean renewable energy technologies such as solar and wind power, or abstinence

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<sup>8</sup> It is important to note that environmental security has been used in a range of different ways and remains contested (for a discussion on this, see Floyd 2007: 340-2).

and great efficiency of energy use' (Barnett 2001: 35). From a similar perspective, Trombetta notes that unlike environmental or climate security, energy security has always been closely linked 'with national security and its logic' (2008: 597). This has had an impact on how energy security is governed: 'the energy sector contributes a substantial portion of states' income and policy', and as a result is characterised by bilateral agreements between states and limited multilateral institutions (Trombetta 2008: 597).

Following a similar argument, Mulligan highlights how discourses of energy security focus on state security 'while largely overlooking discourses of environmental or ecological security' (2010: 79). He demonstrates a historical separation between energy and environment, which relies on an ideological separation of 'man' and 'nature', linking fossil fuels to the human world (Mulligan 2010: 86). This has had a direct effect on energy policy, emphasising human agency, innovation and reinforcing the idea that we are in control (Mulligan 2010: 86)<sup>9</sup>. Economic arguments suggest 'any problems of resource decline would be solved through technological advances and market-driven substitution' (Mulligan 2010: 87). Similarly, in security studies,

analysts have long viewed energy (and especially oil) as a national security concern, and the military role in ensuring (or preventing) access to energy resources is well established. By the time environmental security came on stage, then, energy supply was already understood as a matter of national security (Mulligan 2010: 88-89).

The history of energy and the structure of the international system, meanwhile, separates it from environmental security, as 'energy security could be provided for by military means, while also being essential for military superiority' (Mulligan 2010: 88-89). Even more importantly, the role of sovereignty and sovereign rights over territory have made it very difficult to consider these as joint or global resources: 'fossil fuels have historically been

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<sup>9</sup> Interestingly, Mulligan also notes that discourses of 'peak oil' focus on the role of human agency in producing oil scarcity, as opposed to understanding it as an ecological scarcity (Mulligan 2010: 87).

seen in terms of “property”, and as subject to states' sovereign right to exploit their natural resources’ (Mulligan 2010: 88-89).

Problematically, discourses of ‘energy security’ remain centred on fossil fuels, and oil in particular (both in traditional discourses and alternative ones), and so in a sense mainstream energy security is also finite. Arguing that a traditional understanding of security cannot address today’s threats, Mulligan suggests that energy and environmental security need to be reconnected through a focus on climate change which ties the two together, and can be represented ‘as a threat to the world, rather than just to specific states and economies’ (2010: 94). As such, international agreements modelled on those dealing with other environmental resources offer a possibility of dealing with resource scarcity and climate change, rather than turning to conflict and competition (Mulligan 2010: 94). Still, for this to happen there is a need to reconceptualise energy security:

such a shift in the *practice* of energy security necessitates a shift in the *concept* of security that, instead of emphasizing state-centered and military aspects, is grounded in discourses of global and human security (Mulligan 2010: 94)

While providing a clear analysis of the historical separation between energy and environment and the need to change the concept of energy security, Mulligan’s account fails to go into any depth on either the possibility of such a change, or the way in which this could or should be done. Trombetta provides a more interesting account of the potential for change, which will be discussed in more detail in the next section.

Mulligan has also produced a later paper looking at the securitisation of energy, again noting the separation of energy and environment and arguing that while state energy security policies are increasingly analysed, the actual decline of energy resources has been neglected in the literature (2011: 633). In this paper, he asserts that energy is already

securitised, pointing to current state energy practices as characterised by coercion, contract breaches, neglect of international law, ignorance of human rights, and resource wars (Mulligan 2011: 645). As a result, he argues that ‘the impending decline in available global energy’ can be also be viewed as a threat to ‘political order and human welfare’, and argues in favour of ‘an ecologically informed securitisation of energy’ as a way of putting declining resources back on the agenda (Mulligan 2011: 634). However, he provides little evidence that energy is fully securitised other than noting some problematic state energy practices. Likewise, little explanation is provided of what an ecologically informed securitisation of energy might look like, and how such a securitisation would occur, given the lack of global governance of energy. The ethical aspects of securitising energy are dismissed in one line, and there is no discussion of how securitising resource scarcity would lead to energy being approached as an issue of human ecology rather than state security (Mulligan 2011: 645).

Beyond this, few authors have looked at the construction of energy using securitisation<sup>10</sup>. Radoman has looked at EU-Russia relations using securitisation, suggesting that ‘the trade in energy supplies is no longer merely a question of economics but also become political’ (2007: 36). She highlights the problems of potential securitisation of energy as it would change state behaviour, to ‘irreversibly renounce rational and responsible efforts to find a model of relations that would achieve energy security, as well as general security’, causing mistrust and fear in bilateral relations, ultimately producing an energy security dilemma (Radoman 2007: 44).

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<sup>10</sup> For two studies looking at the securitisation of energy in the EU, see Naturski and Herranz Surrallez (2008) and Stoddard (2012).

### ***1.3.2 Conceptual critiques: What is energy security?***

A growing number of works question the concept of energy security itself, with Valentine noting the ‘fuzzy’ nature of the concept (2010) and Ciută noting that ‘energy security clearly means many different things to different authors and actors, and even at times to the same author or actor’ (2010: 127). Even more problematically, ‘some politicians refuse to define energy security at all’ (Sovacool 2010a: 2).

Chester points to the ubiquitous nature of the term ‘energy security’ in contemporary debates about energy issues, suggesting a few key characteristics usually related with the term (2010: 887) that correspond with the areas covered in the discussion of the mainstream literature here. He also notes that the meaning is rarely explained or discussed, remaining ‘implicit’, while ‘the limited discourse about its nature or any underlying assumptions has been totally eclipsed by an almost overwhelming focus in the literature on securing supplies of primary energy sources and geopolitics’ (Chester 2010: 887). He argues that the concept itself is slippery as it is ‘polysemic’ in nature (Chester 2010: 893) – that is to say, it has multiple, *related*, meanings. Ultimately, energy security ‘takes on different specificities depending on the country (or continent), timeframe or energy source to which it is applied’ (Chester 2010: 893). Thus, at various levels of analysis energy security ‘may contain similar notions of availability, adequacy, affordability and sustainability but the specificities of each will understandably differ at any point in time’ (Chester 2010: 893). Similarly, Knox-Hayes et al. studied attitudes towards energy security in ten countries, finding that ‘energy security is a highly context-dependent condition that is best understood from a nuanced and multi-dimensional perspective’ (Knox-Hayes et al. 2013: 609).



Ciută provides a somewhat different analysis of energy security. Vitaly, he asks: ‘in what sense is energy a security issue?’, looking at the relationship between energy and security (2010: 123). He argues that simultaneously, ‘the proliferation of energy security discourses has...established the legitimate association of energy and security and...prevented a closer conceptual and normative attention to energy security’ (2010: 124). In this way, the literature suggests ‘there simply is no need to debate what energy security is, because we know both *that* energy is a security issue and *what* security is’ (Ciută 2010: 124). However, the relationship between energy and security is problematic and needs to be analysed more closely – bringing energy into the domain of security ‘is likely to affect the manner in which energy policies are pursued’, but moreover, energy itself can conversely affect how we think about security in general (Ciută 2010: 124). Ciută’s analysis of energy security presents a concept that is multiple and context-dependant. He argues that energy is ‘a *total* field’ as ‘nothing exists that is not energy, or not affected by energy...[t]he totality of energy has thus the potential to normalise security and render it politically unexceptional’ (2010: 124). He points to references to energy security as carrying ‘different connotations in different contexts’ (Ciută 2010: 124). However, the review of the literature presented here shows a much more specific understanding of energy security running through the literature of energy security, both conceptually and in the US and China, with the understanding of security remaining very particular and attached to a highly conventional logic of security that, rather than normalising security, attaches energy to security understood as exceptional national security politics.

His analysis presents three logics of energy security that ‘structure the understandings of energy security in different (and at times the same) contexts’: a ‘logic of war...a logic of subsistence and a logic of “total” energy security’ (Ciută 2010: 125). These logics are

broader than the ones presented here, as he does not focus on a specific geographical context or a specific literature, combining analysis of discourses produces by states, institutions, think-tanks and academic literature. Other approaches to energy are said to be too wedded to the idea of a fixed understanding of security, and ultimately ‘afford only a limited understanding of the effects security and energy exercise on each other, and in particular the fact that the domain of energy produces mutations and multiplications of the meaning of *security*, not just the multiplications of threats, subjects and objects of security policy’ (Ciută 2010: 125). However, this ignores the way in which energy security in IR and security studies is rooted in a particular traditional understanding of security. Energy security as conceptualised in the majority of the literature does not really challenge the traditional state-centric understanding of security, or the referent object of security – as can be seen in the discussion on the mainstream energy security literature presented here. While Ciută’s analysis has a broader focus, it exaggerates the multiplicity of understandings of energy security. In the majority of the literature, whatever focus or solutions are presented, the ultimate purpose of energy security is still securing the state or economy in supply and/or price terms.

He does not discuss the relationship between each logic and particular assumptions about the international system and consequently, specific views of what ‘desirable’ policies and outcomes are. Because of the differences between solutions presented by realist and liberal logics – titled ‘logic of war’ and ‘logic of subsistence’, respectively, by Ciută - he argues that ‘energy security policies remain non-specific as *security* policies’ (2010: 134). Conversely, I argue that security policies in energy security are not non-specific but based on very particular understandings of security which are directly based on particular referent objects of security. He concludes that energy security shows a transition towards a

third logic, ‘total energy security’ (Ciută 2010: 135). In this logic, energy is multidimensional, ‘energy affects everything, everything affects energy, and ultimately, everything *is* energy’ (Ciută 2010: 135); as a result, energy security is everywhere, with indefinite targets, threats and vulnerabilities:

energy security means the *security of everything*: resources, production plants, transportation networks, distribution outlets and even consumption patterns; *everywhere*: oilfields, pipelines, power plants, gas stations, homes; *against everything*: resource depletion, global warming, terrorism, ‘them’ and ourselves. At its maximum, this logic invests every single object of any kind with and in security (Ciută 2010: 135)

While this can be considered true in theory, in particular if understandings of energy security beyond IR are considered, in practice energy security remains much more specific. It is strongly tied to a traditional understanding of security with the state or economy as a referent object, and the logics of energy security remain tied to a conventional understanding of security.

Interestingly, Ciută concludes that energy security presents ‘a puzzle for security theory in general’, as they run against ‘the disciplinary quest to establish peremptorily the “essence” of security’ (2010: 139). Overall, the meaning of security needs to be understood contextually, recognising the (potential) variation in meaning (Ciută 2010: 139). This also provides potential for changing the meaning of energy security, as ‘energy can potentially attach itself to any definition of security’, including competition/war but also ‘cooperative and non-conflictual understandings of security’ (Ciută 2010: 138). This is also noted by Trombetta, who argues that while securitisation of energy can be problematic for energy, attaching security to energy does not just change how we view energy but also has potential to change security (2008).

Hildyard et al. also note the normative problems of the way energy security is conceptualised, following Ciută's argument that the concept of energy is vague, but taking it further by introducing normative concerns: 'measuring "energy" and "energy sources" cannot by itself help decide which types, amounts or uses of energy are more important for humanity's future...[i]t may even get in the way' (Hildyard et al. 2012: 6). They have produced a report exploring 'the pitfalls of "energy security" as rhetoric and as policy' (Hildyard et al. 2012: 6). In this process, they present clear normative concerns that are ignored in energy security policy and literature, arguing that ultimately, the phrase 'energy security' (and policies framed around it),

obscures increasing inequality, diverts attention from the need to slow global warming and nurtures underlying conflicts. In sum, it gets in the way of effective discussion about, and organisation for, a democratic, fossil-free future. A critical examination is needed to find ways to talk about poverty, climate and other issues connected with "energy" that are more coherent and analytically fruitful as well as better attuned to progressive goals (Hildyard et al. 2012: 6)

This highlights clear problems with the way energy security is understood and used and the need for change recognising 'the collective security and survival of all above the individual short-term gain of a few, and acknowledging the deep political, economic, social – and even psychological – entrenchment of today's locked-independence on coal, oil and gas' (Hildyard et al. 2012: 6-7).

Valentine vitally notes the problem of ontological and epistemological 'blindness' in the existing literature on energy security, which works to obscure underlying assumptions and choices in terms of how energy security is represented. Most energy security studies 'fail to acknowledge critical assumptions that skew or bias the findings' and present 'assessments as if they reflect absolute objectivity' (Valentine 2010: 70). Ultimately, policies are undertaken in the name of energy security with little or no clarification of what

the term itself means. These conceptual critiques of energy security highlight a clear need for more research into the concept of energy security itself.

### ***1.3.3 Broadening energy security: securing what or whom?***

The last group of critiques focus specifically on broadening the meaning and changing the referent of energy security. In practice, energy security remains close to traditional military-political notions of security and closely linked with fossil fuels (Simpson 2013: 249). However, a range of work is increasingly advocating broadening the concept of energy security (see chapter on various dimensions of energy security in Sovacool 2010b), particularly emphasising the need to add sustainability to definitions of energy security, though the security of people and the planet are largely ignored in mainstream analyses.

Bradshaw and others highlight the need to recognise a wider range of interests in the energy security debate, focusing energy security away from supply security to recognise the interests of energy importing states and energy exporters as well as incorporating climate change into the debate (Bradshaw 2009: 1920). However, the mainstream literature on energy geopolitics ‘still fails to engage with the potential consequences of climate change’ (Bradshaw 2010: 281). Problematically, environmental sustainability remains separated from concerns over security of supply (Kruyt et al. 2009). Bradshaw emphasises globalisation and the need to address energy security concerns above the state level, arguing that energy security and climate change are global problems that cannot be solved by a single state or region (2010: 287). The international system is presented as globalised, and the underlying assumption is one where globalisation and climate change will force cooperation over energy security. The referent object of energy security is thus

taken to a global level, securing the planet, while recognising the vital role of energy in development and human welfare.

Dannreuther questions the focus of energy security, focusing largely on broadening the concept of energy security beyond ‘the interests of the rich, primarily Western, energy-importing states’ (2010: 145). He also argues that energy security needs to move away from a traditional understanding of security and move ‘beyond the limitations of the conventional debate with its competing realist and liberal approaches’ (2010: 146). He emphasises the human security dimension of energy security, recognising that ‘the conventional focus on rich, oil-importing states fails to recognise that the citizens of these wealthy states generally enjoy the benefits of a continual and assured access to reliable, cheap and modern energy’ (2010: 147). Overall, ‘it is only the citizens of developed countries, the third most wealthiest portion of the world’s populations, who enjoy affordable and reliable energy supplies’, while a quarter of the world’s population lacks access to electricity (Dannreuther 2010: 147; see also Wirth et al. 2003: 133). He points to the impact of this ‘endemic energy insecurity’ on the human security of the poorest most vulnerable people, and its constraints on ‘economic and social development’ (Dannreuther 2010: 147). Adding to this, Simpson notes the state-centric, US or European focus of the vast majority of the energy security literature, highlighting that rather than secure oil supplies, citizens of the global South still largely rely on fuel wood for energy (2013: 249). He also suggests that ‘a critical energy security perspective relates more to the ability of individuals, particularly in marginalised or deprived communities, to secure sufficient access to energy for their personal needs’ (Simpson 2013: 250).

Other areas ignored in the traditional energy security debate include societal security, in particular ‘the security interests of the citizens of the energy-rich oil exporting states themselves’, where state elites tend to benefit disproportionately (Dannreuther 2010: 148). Demand security of oil producing states is also overlooked, as these states need ‘stable and secure revenues for development’ (Dannreuther 2010: 149). This difference in interests between oil producing states and the west is pointed to as the ‘North-South dimension of energy security’ (Dannreuther 2010: 150). This is also highlighted by Simpson (2007). Dannreuther points to environmental security as in conflict with energy security, in particular in the common use of coal to ensure energy security (2010: 150). The fundamental long-term question for energy security is ‘whether the political norms, structures and institutions that we currently have will be capable to rise to this complex and demanding set of challenges’ (Dannreuther 2010: 153). Dannreuther highlights some important and interesting neglected areas of the traditional energy security debate, in particular the human security dimension. However, he fails to provide any analysis or explanation of why or how these issues are ignored. The construction of energy security as a traditional security issue through the realist and liberal logics limits the parameters of the energy security debate, and without reconceptualising energy security these issues will remain ignored.

Similar gaps in current energy security policies are noted by Wirth et al., who also note ‘the danger to political and economic security posed by the world’s dependence on oil’ (2003: 133). Air pollution and global warming are also noted as major threats to health and political stability, which cannot be dealt with without changes in the energy sector (Jacobson 2009: 149). Large-scale changes to the energy sector are also needed ‘to secure an undisrupted energy supply for a growing population, particularly as fossil-fuels become

more costly and harder to find/extract' (Jacobson 2009: 149-50). Discussions note the need to rethink security and what is considered a 'threat', as 'both geopolitical interests and environmental sustainability call for a radical departure from current patterns in the use of fossil fuels, which compromises the national security of most states and threatens the entire planet' (Pascual and Zambetakis 2009: 32). Simpson also critiques the traditional focus on fossil fuels, arguing that critical analysis of energy security 'should include some discussion of the intrinsic bias given to energy technologies' – 'fossil fuel and nuclear technologies all favour large-scale industrial development and have centralising political and economic consequences' (Simpson 2013: 254). He also argues that critical approaches focusing on justice and sustainability provide 'an antidote to the traditional definitions of energy security that are associated with militarism, wars and unsustainable, unnecessary and inappropriate levels of industrial development' (Simpson 2013: 260). However, while such a definition does provide an alternative discourse, it does not provide any solutions or paths for changing the dominant discourse. Likewise, a focus on the South neglects the fact that the biggest global energy consumers – the US and China – are key contributors of energy insecurity. Hildyard et al. presents a similar human security focused critique of energy security to Simpson, suggesting that policies securing fossil fuel supplies

are triggering a cascade of new insecurities for millions of people – whether as a result of the everyday violence that frequently accompanies the development of frontier oil and gas reserves, or because the pursuit of "energy security" through market-based policies denies many people access to the energy produced. Indeed, the more that the term "energy security" is invoked, the less clear it is just what is being "secured" (Hildyard et al. 2012: 5)

In broadened discussions of energy security, the referent ranges from states to individuals to global humanity and the global or local ecosystem. The focus ranges from environmental protection to human welfare, and the agenda is strongly normative: 'energy security is not a desirable goal if it is to be only achieved at the expense of some other significant environmental insecurity' (Simpson 2013: 250). These analyses highlight just



how much is overlooked by the mainstream energy security literature, presenting a clear case for the importance of critical analyses of energy security.

#### **1.4 Conclusion: towards a critical energy security studies**

Energy underpins fundamental human needs and is essential for the continued functioning of society as we know it. It also underpins state survival in economic, political and military terms. As a result, ‘energy security as a concept has been traditionally approached from a state-centred national security perspective’ (Simpson 2013: 248). However, as is clear from the discussion presented here, there is an emerging debate over ‘what energy security is and ought to be’ (Sovacool and Lin 2010: 414).

The mainstream literature on energy security is organised around a conventional logic of security, which, whether realist, liberal or comprehensive, is based on very similar ontological and epistemological assumptions. Energy security is understood as closely linked with national security, and with fossil fuels – particularly oil supply. While some argue energy security needs to be broadened, emphasising sustainability in particular (Umbach 2012), in the vast majority of the literature concerns about sustainability are sidelined. Moreover, Luft et al. go as far as asserting that energy security need to retain a narrow focus on secure fossil fuel supplies as too much focus on climate change could ‘compromise’ energy security (2010: 43). Rather than questioning the traditional notion of energy security, they argue the concept needs a ‘guarded perimeter’, advocating ‘a more factual and dispassionate discourse’ that notes the problems with broadening (Luft et al. 2010: 52-54). Overall, running out of oil is not considered a key concern of energy security studies – Yergin suggests that the real risk to supplies in next two decades ‘is not geology but geopolitics’ (2005: 51). Problematically, the literature remains closely wedded to a

traditional notion of (state) security that relies on continued fossil fuel supplies, seen in both realist and liberal approaches. This works to limit energy security conceptually, effectively closing off and limiting the parameters of the energy security debate. No normative agenda is presented – the way energy security is currently understood is represented as ‘inevitable’, with little potential for change.

Meanwhile, the critical literature as it stands is still only emerging and lacks coherence, with little or no recognition in the mainstream energy security literature. It remains severely underdeveloped, but opens up the space and agenda of energy security to question the traditional understanding of energy security. Problems with the current notion of energy security are identified, and it presents an interesting account of how energy security has become linked with national security, as well as providing the beginning of a conceptual interrogation. However, it remains abstract and theoretical, with few studies looking at how energy security is constituted in particular empirical cases. Radoman highlights some problems with securitising energy (2007), but there are no discussions of the ethics of security or securitisation regarding energy – Mulligan even dismisses the need for such a discussion (2011: 645). Likewise, while there are some interesting arguments made in favour of changing the referent of energy security to global, common or ecological security, there is little discussion of how this is to be done. Overall, a more assertive normative dimension is important, and lacking in much critical work on the topic. Highlighting the normative problems of current notions of energy security and interrogating the space for change is vital in policy terms. However, the conceptual debate on energy security has only begun, leaving a large space for this thesis to contribute to. Moreover, there is no existing in-depth empirical research using critical analysis of energy

security to study specific empirical cases, so the focus on the United States and China undertaken here provides an important departure and starting point.

This chapter has illustrated how the academic literature constitutes energy security conceptually and with reference to the US and China. There is clearly a need to develop a critical approach to energy security, to problematise the concept itself, looking at the construction of energy as security through discourse and practice, with an empirical focus. This is where this research fits in. This thesis focuses on how energy security is constituted in the US and China, with an emphasis on meanings and referents of security. In this process it develops a normative agenda, considering what energy security *should* be, and whom it *should* secure. The following chapter also considers whether security in the case of energy is a ‘good’ thing.

## CHAPTER 2

**A critical approach to energy security**

The last chapter discussed the existing debates on energy security. It illustrated that the mainstream academic literature on energy security relies on a traditional notion of national security, presenting an anarchic international system where continuous and undisrupted fossil fuel supplies are essential for state survival. These assumptions underlie all of this literature, whether the solutions presented are realist (strategic), liberal (market-focused), or some combination of the two. The literature presents a conventional view of energy security whereby something is a security issue because it threatens (the survival of) the state, whether in strategic or economic terms. ‘Threats’ to energy security are portrayed as objective and common-sense, and are rarely questioned. The literature fails to recognise the link between particular underlying assumptions about the international system and how energy security itself is understood. In contrast, it is argued here that energy security and ‘threats’ to energy security are constructed through discourse and practice. Any construction of energy as a national security issue relies on a number of subjective value-judgements about the need to preserve (or secure) the existing order.

Problematically, the literature presents competition between states over energy resources, whether economic or strategic, as ‘natural’ (Xu 2008: 266), and therefore inevitable. As a result, there is no real possibility of change to the status quo. In contrast, I argue here that a static conception of the anarchic international system where states will always compete for

survival is both primitive and normatively unattractive, as it is simplistic and can neither theorise nor provide any possibility for change<sup>1</sup>. A traditional understanding of energy security that serves only the security interests of states is no longer useful or justifiable. As energy increasingly becomes incorporated in security agendas, attempts by states to respond paradoxically produce *insecurity*. The existing critical literature on energy security remains limited and underdeveloped, particularly in terms of theorising change. However, it offers important insight into the historical link between energy and national security and the constructed nature of energy security, providing a good starting point for this research.

This chapter develops a methodological, analytical and theoretical framework appropriate for investigating how energy security is constructed in the United States and China, with an emphasis on the relationship between energy and security. It relates the analysis of energy security to the growing debate over the ethics, or value, of security, building on work that highlights the contextual and contested nature of security (Ciută 2009; McDonald 2012) to argue that security not only means different things in different contexts, but also has no fixed value. It is contested, and therefore sometimes more positive and sometimes more negative in character and consequences. In this process, I draw on critical constructivist work, as well as critical approaches to security broadly conceived. There is not space here to discuss all of the literature on the subject, so it represents a necessarily selective, rather than exhaustive, discussion of the most relevant pieces. By looking at the political consequences of representing energy security in a particular way, this thesis argues that using a particular discourse of energy security makes

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<sup>1</sup> Of course, most realist authors are very aware that traditional realist policies to security can likely lead to self-defeating outcomes, producing security dilemmas. That is not the critique here, however. They do not think the current situation is changeable, while I argue here that such policies are not only self-defeating, but that realist representations of the international system as an anarchic realm where states perpetually struggle for survival effectively work to *reproduce* this world, not only failing to provide a possibility of change but also making any change to the status quo unlikely.

particular policy processes possible. Defining energy security as ‘security of supply’ at stable prices works to limit energy security conceptually, effectively closing off and limiting the parameters of the debate.

The chapter begins with a discussion of methodology, discussing the relationship between discourse and practice and what kinds of questions such an approach leads to. It then discusses the potential for change and outlines a pragmatic approach. The following section introduces critical constructivism as the framework for analysis, showing how this provides the starting point for interrogating the socially constructed nature of energy security with a strong normative agenda. The rest of the chapter discusses the more specific theoretical literature on security that the research draws on, beginning with critical security studies and then the emerging literature on the ethics of security. Lastly, it discusses a contextual approach to the value of security in more detail. In this way the chapter presents the framework used in this thesis for understanding and conceptualising energy security, and to examine the space for change.

## **2.1 Methodology**

As an academic discipline, International Relations (IR) contains a growing multiplicity of methodological approaches to studying international security. As a result, there are ‘multiple perspectives on how questions should be asked and analysis developed’ (Hansen 2006: 17). Like all research, this thesis is based on a number of methodological assumptions, or ‘wagers’, that inform how I view knowledge claims. This section draws on Jackson’s *The conduct of inquiry in international relations*, understanding methodology as ‘philosophical ontology, setting the context within which particular practices of knowledge-making might make sense’ (Jackson 2010: 32). All research is underpinned by

particular philosophical-ontological wagers, which cannot be proven definitively; these assumptions define ‘the researcher, the world to be researched, and the character of the relationship between them’ (Jackson 2010: 32-35). In this way, they ‘quite literally set the stage for the kinds of empirical and theoretical puzzles and challenges that a scholar takes to be meaningful and important’ (Jackson 2010: 34). The vast majority of work on energy security rests on neopositivist assumptions, viewing the researcher and the world to be researched as separate. On these assumptions, valid knowledge claims have to correspond to an objectively existing reality that manifests itself as external to the observer, and thus validity is ensured through hypothesis-testing or by producing cross-case comparisons. In contrast, this research rests on different methodological assumptions, understanding the researcher as an inseparable part of the world being researched<sup>2</sup>. Following this approach, we cannot speak of a ‘world’ existing separately from ‘the activities of making sense of that world’ (Jackson 2010: 36; see also Yanow 2006). Likewise, from this position researchers do not have ‘privileged, objective access’ to an independently existing empirical world (Neal 2013: 44). This does not mean that research is impossible, but that we need to acknowledge the role of the researcher in the process. Research involves making a number of choices throughout the research process and as such any results and answers necessarily reflect a researcher’s assumptions, interests and choices.

Viewing the world as inseparable from the activities of making sense of that world, this research argues that ‘neither ideas nor materiality have a meaningful presence separate from each other’ (Hansen 2006: 22). Language and materiality are both understood as ontologically significant, with language giving materiality meaning; as such, language is

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<sup>2</sup> This is not to say that positivist approaches have no merit – they highlight some important issues around energy security that this research cannot and does not deal with. However, it is essential to note the difference in underlying assumptions to highlight how and why this work differs from that, as different approaches are better fitted to answering different questions/problems.

‘constitutive for what is brought into being’ (Hansen 2006: 17), the world is given meaning through discourse. Discourses are understood following Milliken, as ‘structures of significations which construct social realities’ (1999: 229). She notes that a constructivist notion of meaning underpins this commitment: ‘things do not mean...rather, people construct the meaning of things’ (1999: 229). This is primarily done through discourse but also through other meaning-making systems – including visual practices and physical action. Vitality, meaning is *intersubjective* – it is *socially* constructed. Discourse and materiality stand in a ‘co-constitutive’, rather than a causal relationship as traditionally understood: ‘representations and policy are mutually constitutive and discursively linked’ (Hansen, 2006: 28), they enable each other<sup>3</sup>. In this way, actors represent ‘energy security’ through discourse, enabling particular policy choices which in turn re-enable and reproduce ‘energy security’ as a concept. Thus, discourse and materiality cannot be separated. Throughout, I therefore use the word ‘construction’ in this dual sense, with the phrase ‘energy security *constructions*’ referring to both discursive and policy practices.

Energy security threats do not simply ‘exist’ in the form of disrupted supply lines and similar ‘material’ problems. Rather, such ‘threats’ are situated within a discourse of national security, where the continued existence of the state in an anarchic international system is privileged. Through this discourse defining the materiality of energy security ‘threats’ becomes commonsensical and difficult to question from within the existing discourse. To use an example provided by Dalby, ‘in a society not addicted to the private automobile and with heating systems and machinery fuelled in other ways, scarcity of petroleum isn’t a threat’ (2009: 18). Of course, in societies fuelled by petroleum, disrupted

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<sup>3</sup> It is worth noting that the division between causal and constitutive approaches is not clear cut. As illustrated by Kurki, this divide rests on a very specific notion of causality, while if a more reflective notion is used it becomes clear that “‘constitutive’ relations are intimately tied up to causal relations’ (Kurki 2006: 215).



supplies do pose a threat – but the threat could be interpreted and constructed in a number of ways – to the state, the economy, or to consumers. Moreover, it could equally be argued that *continued* oil supplies present a threat to the climate. As noted in the previous chapter, the current mainstream energy security literature (whether realist or liberal) largely frames energy security around a highly conventional logic of security. Energy security is understood as closely linked with national security, and with fossil fuels – particularly continuity in oil supply. Such discussions about ‘threats’ are underpinned by (often implicit) geographical representations which “geo-graph” or “write the earth” (Dalby 2010: 52), limiting our categories of analysis. This in turn limits the possibilities of thinking outside the ‘national security box’, reproducing states as the centre and limit of both political thinking and acting, and as the limit of security. Consequently, discourse and representation cannot be separated from the “real world” - ‘for problems or facts to become questions of security, they need therefore to be successfully constructed as such within political discourse’ (Hansen 2006: 34). In the case of energy, this is done within a discourse of national security.

Viewing discourse and policy as mutually constitutive leads this research to ask different questions. Rather than asking ‘why’ energy security is constructed in a particular way, this research focuses on ‘how’ questions, following Doty (1993: 303). Thus, this research asks: *how* do particular representations of energy security work to make particular policies possible and others less possible? It analyses *how* discourses construct subjects and position these against each other hierarchically - and also ‘*how, from this construction and positioning, various possibilities of practice emerge*’ because of the reality that is constructed (Doty 1993: 304, emphasis added). As such, the focus here is on how particular constructions of energy security work to enable certain practices and policy

choices while making other policy choices less likely. In the analysis of state energy security discourses, this is used to highlight the link between these policy discourses and a conventional notion of (national) security, and the way in which this link enables particular policy responses. Thus, this thesis looks both at energy security discourses and the policy choices which they enable.

Language is fluid and constantly evolving. All representations can be contested, ‘and so must actively be reproduced...[m]eanings, in other words, are neither static nor final; rather, they are always in process and always provisional’ (Shepherd and Weldes 2008: 533). The unstable nature of language means that discourses can only ever be partially fixed, which means that there is always space for change (Doty 1996: 6). The normative commitment of this thesis leads the analysis towards disrupting ‘common sense’ understandings of energy security, to recognise that energy security could, and maybe *should*, be constructed differently. As a part of this, it looks at both ‘dominating or hegemonic discourses’, together with an analysis of ‘alternative discourses excluded or silenced by a hegemonic discourse’ (Milliken 1999: 230). This is used to highlight the potential for re-imagining energy security, following Milliken’s suggestion that ‘concretising other possibilities is surely the best way to enable people to imagine how their being-in-the-world is not only changeable but, perhaps, ought to be changed’ (1999: 244). By showing how energy security is constructed, and by whom, this research will also show that alternatives are possible.

Following these wagers, the approach taken in this research is pragmatic, in that the overall aim is to ‘seek knowledge that will enable us to deal with relevant problems’ (Friedrichs and Kratochwil 2009: 726). Thus, the emphasis is not on producing or

uncovering an objective ‘truth’ that is ‘out there’ in an independently existing world, but on gaining practically useful knowledge, which is always provisional and always historically contingent (Friedrichs and Kratochwil 2009: 713). Rather than using a positivist approach defining the concepts at the beginning of the research process and holding them constant, the conceptual framework and field of research were allowed to adapt throughout, with concepts adjusted throughout the research, to avoid ‘self-imposed conceptual blinders’ (Friedrichs and Kratochwil 2009: 717). This included the conceptual framework, following Wilkinson’s approach of using securitisation theory as a reference point rather than a definitive answer (2013b: 8). Following this approach, it is also worth clarifying that this research is not a comparative project, as empirical generalisation is not the goal. The framework developed here is helpful for understanding my case studies, and may work in other concrete cases, but it is not a ‘general law’.

## **2.2 Critical constructivism**

Following these methodological assumptions, the analytical framework used in this research draws on critical constructivism, which allowed me to ask the questions I was interested in and to analyse my puzzle. Critical constructivism is associated with a number of authors, including Jutta Weldes, Roxanne Doty, Karin Fierke and more recently, Matt McDonald. Pursuing critical social constructivist analysis involves committing to the following analytical principles:

1. What is understood as reality is socially constructed.
2. Constructions of reality reflect, enact and reify relations of power. In turn, certain agents or groups of agents play a privileged role in the production and reproduction of these realities.
3. A critical constructivist approach denaturalises dominant constructions, offers guidelines for the transformation of common sense, and facilitates the imagining of alternative life-worlds. It also problematises the conditions of its own claims; that is, a critical constructivism is also reflexive (Weldes et al. 1999: 13)

In following these principles and advocating a critical constructivist approach to energy security, this research asks very different questions to conventional work on energy security. While the more conventional work provides some important insights, it asks very particular questions that rest on the assumption that insecurity is an ‘unavoidable fact’ in an anarchic international system, thus focusing on securing the state in this context (Weldes et al. 1999: 10). Such an approach fits under what Cox would refer to as ‘problem-solving’ – in contrast, a critical approach ‘stands apart from the prevailing order of the world and asks how that order came about’ (Cox 1986: 129). In this vein, this research interrogates current energy security policy practices in the United States and China, and looks at how dominant energy security discourses enabled and made-possible these practices. In this vein this research aims to illustrate the constructed nature of energy security through questioning the assumptions on which it is based. Likewise, by disrupting the hegemonic ‘common-sense’ notion of energy security, illustrating the way in which it is constructed and the assumptions which underpin this construction of energy security as ensuring state fossil fuel supplies, it also opens up potential for challenging the accepted understanding of energy security.

To explain in more detail what I mean by taking a critical constructivist approach, it is necessary to first briefly consider what I refer to here as ‘conventional’ or ‘thin’ constructivism and how this approach differs from that. In International Relations (IR), the label ‘constructivism’ has been applied to a broad spectrum of approaches, with a range of epistemological positions taken varying from broadly positivist to post-positivist (see Checkel 2004: 230-1). While constructivism was introduced to IR by Onuf (1989), Alexander Wendt (1992, 1995, 1998, 1999) has arguably been the most influential conventional constructivist so far. Constructivists are united by an understanding of world

politics as ‘socially constructed’, which is based on two claims: ‘that the fundamental structures of international politics are social rather than strictly material..., and that these structures shape actors’ identities and interests’ (Wendt 1995: 71-2). Moreover, ‘material resources only acquire meaning for human action through the structure of shared knowledge in which they are embedded’ (Wendt 1995: 73). As a result, analysing the social construction of world politics involves analysing ‘how processes of interaction produce and reproduce the social structures – cooperative or conflictual – that shape actors identities and interests and the significance of their material contexts’ (Wendt 1995: 81). So far, this research follows Wendt’s understanding of constructivist theorising.

Critical constructivism shares much common ground with mainstream constructivists, in particular ‘the view that the material does not come classified, and that, therefore, the objects of our knowledge are not independent of our interpretations and our language’, likewise believing that ‘there is some foundation for knowledge’ (Adler 2002: 95). Ultimately, ‘both aim to “denaturalize” the social world’, by illustrating that it is constructed; that understanding the world involves studying intersubjective meanings and reality, emphasising context over generalisation; equally, both ‘accept the nexus between power and knowledge, the power of practice in its disciplinary, meaning-producing, mode. ...Finally, both stress the reflexivity of the self and society, that is, the mutual constitution of actor and structure’ (Hopf 1998: 182).

However, critical constructivism is distinguishable from conventional constructivism when it comes to epistemology and research methods. While mainstream constructivism is conventional when it comes to epistemology and methodology (Hopf 1998: 182), as can be seen in Wendt’s insistence on ‘scientific realism’, critical constructivism has been strongly

influenced by ‘linguistic constructivism’ which focuses on the role of discourse in constructing social reality (Adler 2002: 98). For critical constructivists, ‘meanings are fundamentally discursive: they are made possible by particular discourses that provide the categories through which the world is understood’ (Shepherd and Weldes 2008: 533). However, Wendt’s positioning of constructivism as a ‘middle way’ of IR theory ties him to particular ontological and epistemological choices which in practice work to exclude constructivist perspectives that are critical and post-structuralist (Zehfuss 2002: 260).

This is problematic for this research, as it ties conventional constructivism closely to a traditional causal epistemology. In contrast, critical constructivists do not focus on testing causal theories but rather on denaturalizing ‘dominant constructions, in part by revealing their connection to existing power relations’ (Finnemore and Sikkink 2001: 398). In this way, critical constructivists reject explanation in favour of understanding – leading to an emphasis on ‘how-possible’ questions over ‘why’ questions. It also means that conventional constructivists draw more closely towards positivist attempts to produce ‘objective’ analysis, which does not fit with the aims and wagers of this research. As a result, while offering an explanation of how and why change is possible, constructivism in its conventional form also remains ambivalent on the question of ethics<sup>4</sup> and thus ‘agnostic about change in world politics’ (Hopf 1998: 180). In contrast, critical constructivism opens space for a directly normative agenda. It begins with critique, challenging the ‘common-sense’ of hegemonic representations of the world, and sometimes goes further to re-imagine that world, thinking about possible alternatives to the status quo (for example, see Weldes et al. 1999: 21; and Finnemore and Sikkink 2001: 398). The space that critical constructivists open up for a normative agenda is key for this

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<sup>4</sup> This has been disputed by Price (2008a, 2008b) and Reus-Smit (2008). Price has argued that also conventional constructivists should engage more with normative theorising (Price 2008a: 216).

research project, which is driven by a strong normative commitment to making human beings the primary subject of energy security, following Walker (1988: 128). The growing interdependence of human beings and the environment, moreover (see Dalby 2009), make a stable environment and climate a necessity for people to be secure, today and in future years. This will be discussed in more detail later. Thus advocating change is a central pillar of this project, which conventional constructivism cannot assist.

In the emphasis on change, critical constructivism is influenced by critical social theory, which adds a belief that constructions of reality reflect, enact, and reify relations of power' (Finnemore and Sikkink 2001: 398). This adds a normative dimension that conventional constructivism lacks. Thus, critical constructivists 'share the view that striving for a better understanding of the mechanisms on which social and political orders are based is also a reflexive move aimed at the emancipation of society' (Adler 2002: 98). In this way, it expressly claims 'an interest in change, and a capacity to foster change, that no conventional constructivist could make' (Hopf 1998: 184). In turn, understanding meaning as constructed opens up potential for rethinking energy security. Discourses always contain internal contradictions and gaps, and 'these contradictions make possible both resistance to a dominant discourse and the transformation of discourses' (Weldes et al. 1999: 16). While emphasising the constructed nature of meanings, critical constructivists also recognise that discourses are sites of power - and some, particularly state discourses, have more power than others as 'they are located in and partake of institutional power' (Weldes et al. 1999: 17), which makes them harder to challenge.

While opening space for a normative agenda, critical constructivism remains vague on what such an agenda might look like. This is where this research turns to Walker and

Dalby. This research is underpinned by a normative agenda, arguing that the purpose of security policy should be to provide security for people, regardless of state borders, following Walker (1988: 121). In the twenty-first century, moreover, the security of people is inextricably bound up with the security and stability of the global environment which human beings depend on to continue to exist (Dalby 2009). While ‘world politics is always already based on ethical argument’ (Crawford 1998: 135), this is rarely openly recognised. In the discipline of IR, an overarching acceptance that the international system is anarchic has made state borders the limits for any discussion of ethics (Booth et al. 2000: 1). While there have been a few exceptions, including peace research which has often been positivist but fundamentally concerned with right and wrong (Galtung 1964, 1969), the idea of normative or ethical discussions in the international realm has only recently become more accepted (among others, see Falk 1981; Brown 1992; Pogge 1992; Wheeler 2000). Normative arguments are used to make particular practices and policy choices about what is ‘right’ or ‘wrong’ seem normal and/or legitimate, often helping to reproduce and maintain power relations (Crawford 1998: 134). However, they can also be used to destabilise and question the legitimacy of dominant norms and constructions, providing an alternative (Crawford 1998: 134-5). Moreover, combining an emphasis on discourse with the scepticism of critical perspectives ‘actually expands the possibilities for ethical world politics’ by showing ‘how our arguments can change the world’ (Crawford 1998: 140). In this process, this research also relies on Cox’s understanding of critical theory as theory which ‘allows for a normative choice in favour of a social and political order different from the prevailing order, but...limits the range of choice to alternative orders which are feasible transformations of the existing world’ (1986: 130). The notion of feasibility is central to this research, and links to the pragmatic aims outlined earlier.



Following Fierke, I argue that to some degree, ‘all enquiries into security are normative’ (2007: 3) as studying security necessarily involves making (subjective) choices about what the world ‘is’, producing meaning. Positivist research would understand these choices as objective and based on factual grounds, while a critical constructivist approach argues that such choices are always subjective and therefore involve normative decisions. Therefore, being open about these normative choices is a key starting point for being reflexive. As noted, reflexivity in the research process is essential, and following a more critical approach also involves recognising a researcher’s role in the research process, and ‘their own participation in the reproduction, constitution, and fixing of the social entities they observe’ (Hopf 1998: 184). Consequently, it is also essential to note that attempts to reimagine the world are necessarily always ‘partial and situated’ (Weldes et al. 1999: 21), but visualising an alternative is still a crucial part of advocating change. Ultimately, ‘One...needs to know for what one is fighting, what kind of society one wants to establish’ (Laclau and Mouffe 2001: xix). This research, therefore, looks at how different discourses understand energy security; both in terms of what ‘kind’ of security is constructed or hoped for, in short, what security means in these cases, and what or who precisely energy security constructions aim to secure. As part of this, it looks at both dominant and marginalised constructions to highlight the contested nature of energy security, and how different notions of energy security enable different policy options. This in turn has clear implications for how security works when attached to energy. Marginalised discourses are used to highlight how an alternative energy security might feasibly look, based on already existing discourses.

Viewing theoretical positions as a spectrum rather than distinct positions, with positivist approaches on one end and radical constructivism or poststructuralism on the other, it is

clear that critical constructivism is closely related to poststructuralism. While some critical constructivists, including Adler, are closer to political sociology, the branch used here has taken a ‘deeper, more discursive’ approach which often draws directly on poststructural work (Buzan and Hansen 2009: 198). As a result, there is a lot of overlap, particularly in more sophisticated variants of the two approaches (see Weldes et al. 1999; Doty 1996; Hansen 2006). David Campbell also notes the way in which ‘much critical work combines in a productive way the different positions’ (1998b: 223). Consequently, this research also draws on authors more commonly classified as part of the poststructural turn, including Hansen (2006), Shepherd (2008a) and Walker (1988, 1993, 1997). It is worth noting that many poststructuralists emphasise the danger of metanarratives, and are therefore deeply suspicious of universal notions of ‘progress’ or ‘good’, which aligns their normative agenda more closely with resistance, deconstruction and critique. This is a key difference, as critical constructivists openly advocate visualising progressive alternatives. Overall, the aim of this thesis is to encourage wider theoretical and conceptual debate over the concept of energy security in a changing world, rather than to impose one account of energy security as the only viable approach. As such, the approach used here presents an alternative, a starting point for re-imagining energy security in a way that may work to secure people rather than states. This is where this research departs most clearly from a poststructural approach.

### ***2.2.1 From critique to reconstruction***

It is clear that there is some tension between a broadly interpretivist approach and ‘reconstruction’, or envisioning alternative realities. If there is no objective reality beyond what is constructed, is it possible to establish what is ‘ethical’ or ‘good’ beyond an individual interpretation? How does one go about producing an ethical alternative vision

without imposing another problematic metanarrative? Firstly, it is important to note that authors often accused of ethical nihilism, in presenting poststructural or interpretive work that emphasises critique, in reality both address and are deeply concerned with ethics. Deconstruction and critique are ultimately an ethical demand (Critchley 1999: 12). In fact, Critchley's reading of Derrida goes as far as stating that 'there is a *duty* in deconstruction' (1999: 41, emphasis added)<sup>5</sup>. Honneth agrees, noting that 'The very intention of criticizing metaphysics also carries with it certain normative-political consequence' (Honneth 1995: 290). This also ties in with Fierke's argument that all enquiries into security are normative, as outlined in the previous section. Likewise, looking at the later work of Derrida and Lyotard, Honneth suggests that while postmodernism as a philosophical movement may have begun as 'strictly directed against every kind of normative theory,...this initial reticence has since given way to a dramatically changed attitude' (1995: 289). He goes as far as referring to this change as 'an ethical turn' (1995: 289). Meanwhile, work in IR that draws on poststructural writers have often also made ethical arguments, including Walker (1988), Campbell (1998a; 1998b), Campbell and Shapiro (1999) and Dillon (2002). There is not enough space here to do justice to the range of approaches in poststructural ethics, for a fuller discussion see Honneth (1995) and Critchley (1999).

While critical constructivism provides a rationale and an agenda for thinking about reconstruction and potential alternatives to existing reality, it does not fully tackle the problem of grounding ethics. Tension remains over the extent to which critical theory is compatible with a critical constructivist approach – this is an important discussion and an area where much more research is needed. This thesis cannot do full justice to the issues raised by this debate, given the need to focus on its own enquiry within constrained word

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<sup>5</sup>He goes on to note that 'the ethical conception of justice that drives the deconstructive enterprise, and which is defined in terms of responsibility to the other, would seem to be essentially connected to the possibility of political reformation, transformation and progress' (Critchley 1999: 275).

limits, though this research does open up a space for continuing discussion about this. However, the emphasis on intersubjectivity in critical constructivism is key. Reality is socially constructed, and the influence from critical theory provides some rationale for change. Critical constructivism draws on critical theory to ground its commitment to move beyond critique to seek progressive alternatives. However, while critical constructivists frequently reference power and emancipation, the implications or practicality of this are rarely addressed. In the simplest form, critique itself works to make alternatives possible by disrupting ‘common-sense’ or accepted notions of energy security. Thus, critique in itself involves taking an ethical stance<sup>6</sup>. Going beyond this to ‘reconstruct’, however, is more problematic, as any reconstruction risks imposing a new hegemony or dominant narrative.

Thinking explicitly about alternatives is, however, an essential part of advocating change and therefore not something that could be justifiably neglected here. It has to involve a discussion about what kinds of definitions of (energy) security create ethical potential: which are better and which are worse when it comes to providing security. Of course, making any kind of judgement involves some form of decision about what is good, or at least about what is bad or undesirable. It is better to be open than implicit about these decisions – this is also a starting point for being reflexive and open to critique, and even to make critique and self-critique of such choices easier. Encouraging these conversations is essential to avoid imposing a problematic new ‘hegemony’ or metanarrative. In cases where change is necessary analysts have a responsibility to identify alternatives, in this case to move beyond a state-centric notion of energy security to one that provides security for individuals and the environment too. Of course change is difficult given relations of

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<sup>6</sup> For more on this, see Campbell (1998a) for a discussion on the ethos of political criticism.

power, but even deeply entrenched power structures are not fixed, and it would be unethical to treat them as such or accept them rather than try to resist them.

Fundamentally, even if there is no ‘reality’ or ‘real’ outside interpretation, this does not mean that we cannot interpret. Of course there are problems with this, and any potential alternative may also have inherent problems. However, feasibility and change are both key goals of this research, and it would be problematic to advocate change without suggesting an alternative. The approach used here<sup>7</sup> builds on existing marginalised discourses interpreted as ‘better’ and more able to provide the kind of security that should be strived for, which is hoped to both provide a more feasible path for change as well as one that has been to an extent ‘tested’ through on-going articulations, protests and demonstrations calling for change in energy policy<sup>8</sup>. In this sense, the research remains committed to the pragmatic aims outlined earlier. Much more research is needed on ethics and change in security studies, and I cannot do full justice to this discussion here. It is a complex issue and some contradictions persist, but as the emphasis here remains on practical utility the rest of this chapter will move onto discuss ethics and energy security more specifically.

### **2.3 Energy and security**

As shown in the previous chapter, energy security is a field dominated by a traditional approach to security. It relies neopositivist assumptions, understanding both ‘threat’ and ‘security’ as objectively existing material realities, while relying on a conventional logic of security centred around ensuring the survival of the national-security state and/or the

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<sup>7</sup> See Chapter 6.

<sup>8</sup> This is the kind of argument forwarded by Habermas’ notion of communicative ethics (1979, 1981). For a fuller discussion, see White (1989). Naomi Head has also drawn on Habermas ‘to interrogate the intersubjective validity of claims to legitimacy raised by actors in particular contexts’ in a study on justifying violence in Kosovo (2012: 198). This is discussed further in chapter six.

global economic status-quo. This understanding of security is both largely accepted and deeply problematic. Energy remains closely linked with national security, as fossil fuels are an essential part of functioning modern economies and societies, underpinning economic growth (Mulligan 2011: 635). Consequently, we are repeatedly told that ‘second only to national defense, energy plays a crucial role in the survival and well-being of the United States and virtually all other countries, both developing and developed...’ (Hamilton 2005: xxi). However, taking a critical constructivist approach it becomes clear that the pursuit of energy security is underpinned by number of methodological assumptions as well as ethical choices regarding the value of security and security practice, and the suitable referent object of security. Because of the historical primacy of the state, security has become closely linked with state sovereignty, and national security has become privileged in discussions about security (Walker 1990: 8) – however, this link is not inherent.

As currently understood in the literature, energy security relies on a traditional, state-centric notion of security whereby the state has to maximise its security to protect itself from external threats – in this case supply instability and price volatility. Even in liberal notions of energy security the emphasis on stable markets relies on continued supplies of fossil fuels (from states to other states) and continued consumption and economic growth to secure the national/global economy. Both notions enable and encourage zero-sum competition between states over fossil fuels to stabilise or even maximise their own supply, driving up demand. This works to increase tension and mistrust between states, producing insecurity in traditional terms. Moreover, the link between energy and national security also enables a focus on securing state fossil fuel supplies at the expense of the future of the climate and human security. Paradoxically, state maximisation of fossil fuel

supplies in the name of national (energy) security and economic growth is a direct cause of climate change<sup>9</sup>, which, if allowed to continue on present paths, will be a major cause of insecurity for states, the planet and the human beings who rely on it to survive. Thus as energy increasingly becomes incorporated in security agendas, attempts by states to respond paradoxically produce insecurity. Rethinking energy security in more ethical terms becomes increasingly important. It also moves the argument that security needs to move away from traditional geopolitical premises beyond a case of ethical preferences, towards ‘strategic necessities[sic]’ (Burke 2013: 21). At the centre of this is an ethical commitment to making human beings the primary subject of security. The growing interdependence of human beings and the environment, moreover (see Dalby 2009), make a stable environment and climate a necessity for people to be secure, today and in future years.

Critical security studies was briefly introduced in the previous chapter<sup>10</sup>. It is an umbrella term defining a research agenda based around three core commitments: firstly, a fundamental critique of the traditional approach to security, its ontological assumptions and emphasis on protecting the state from political-military threats; secondly, understanding ‘what security *does* politically’, and finally, the ethics of security – understanding what constitutes the ‘good’ of security (Browning and McDonald 2013: 1; see also Krause and Williams 1997). While increasing debate over the meaning of security has highlighted key problems and features of security construction, the critical security studies project has not done enough to address the ethics and the politics of security (Browning and McDonald 2013). Some have rejected security, arguing that it is essentially

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<sup>9</sup> See International Energy Agency (2007: 28).

<sup>10</sup> For a fuller treatment of critical security studies and its research agenda, see Browning and McDonald (2013), Krause and Williams (1997), Burgess (2010), Salter and Mutlu (2013).

negative and best avoided (Neocleous 2008; Wæver 1995; Buzan et al. 1998)<sup>11</sup>. Others have argued that security is an essentially positive value to be fought for (see Booth 1991, 2005a, 2007; Wyn Jones 1999). Following this, there is a small but growing literature on positive/negative security (see Roe 2008, 2012; Floyd 2007, 2011; Hoogensen Gjørsv 2012), which will be discussed in more detail later. This section discusses theories and approaches used in this research to understand the politics and ethics of energy security. It begins with a discussion on the concept of security, before discussing the Copenhagen School and their views on the politics of security, followed by more directly normative approaches discussing what security and security practice should be. Lastly, it introduces the emerging positive/negative security debate and discusses the need to analyse the value of security in practice.

### *2.3.1 What is so special about ‘security’?*

The concept of ‘security’ has a lot of power. Countries are invaded in its name, an ever-increasing range of domestic and foreign policies are justified in its name, and it has an entire academic sub-discipline dedicated to its study. The previous chapter noted the discipline’s preoccupation with defending the borders of the meaning and study of ‘security’ as traditionally conceived, in the name of ‘intellectual coherence’ (Walt 1991: 213). These arguments have essentially focused on the need to retain the focus of study as war and political-military threats to national security. While this focus has been increasingly questioned by a number of critical authors, others have suggested that the history of the concept makes security necessarily particular. ‘Security’ is said to have a heavy conceptual baggage, with strong connotations of national security and militaristic threat-defense thinking (Wæver 1995: 47). Going further, some claim that the meaning of

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<sup>11</sup> Moreover, many critiques of security as negative in critical security studies rely on a commitment to the Copenhagen School’s understanding of security-as-securitisation (for example, see Aradau 2004).



security requires insecurity: ‘it can never escape it: it must continue to produce images of “insecurity” in order to retain its meaning’ (Burke 2002: 20). Similarly Lipschutz suggests that security necessitates exclusion and others made threatening: it is ‘meaningless without an “other” to help specify the conditions of insecurity’ (1995: 9).

One of the peculiarities of ‘security’ as a concept is its vagueness: it has long been recognised that ‘the term “security” covers a range of goals so wide that highly divergent policies can be interpreted as policies of security’ (Wolfers 1962: 150). While Wolfers referred to the way ‘security’ is used by states, increasing debate and discussion over the meaning of security has suggested that security is a ‘contested concept’ (Dalby 1997; Smith 1999; Buzan 1991)<sup>12</sup>. This indicates that it is contested and essentially contestable by its very nature, and furthermore, because it is the very ‘essence’ or meaning of security that is contested. It has always had many, contested and even contradictory meanings (Der Derian 1995: 28)<sup>13</sup>. Moreover, the referent of security is essential to the meaning of the concept itself: ‘To have any meaning, *security* necessarily presupposes something to be secured’ (Krause and Williams 1997: ix). The referent object used to be the state, and things considered threats to security used to be limited to political-military issues. However, this has been increasingly questioned in arguments to broaden and deepen security, questioning both the role of the state as referent and security provider. Increasingly, ‘what it is that should be rendered secure is an essential component of any discussion on security’ (Dalby 1997: 22). A growing number of issues are labelled security issues, leading to debate over the extent to which the label is justified as well as the

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<sup>12</sup> The notion of ‘contested concepts’ derives from Gallie, who argues that essentially contested concepts are recognisable by the way ‘any proper use of this concept is in the nature of the case contestable, and will, as a rule, be actually contested by and in another use of it, which in the nature of the case is contestable, and will, and so on’ (1955: 169).

<sup>13</sup> See Der Derian (1995) for a short but interesting genealogy of the concept of security.

usefulness of the label itself and the extent to which it is helpful or bad to consider them security issues (see, for example, Hudson 2009).

However, energy has long been established as a security issue, because of the role it has played and continues to play in fuelling both national militaries, societies and economies. Secure energy supplies are essential for states' military and economic survival in an industrialised world. This makes it difficult to remove energy from the security agenda. It is also worth noting that the way in which security works with energy may differ from other cases, as 'security' in this case derives from security of supply, though it is increasingly linked with national security too. Ultimately, 'security' is invoked in a range of ways. Here, I am looking at how it works in relation to energy, and when it does – or doesn't – provide security. Throughout, this research draws on a range of critical literature on security, but the focus here is on securitisation theory and the Welsh School, as key approaches discussing the politics and ethics of security.

### *2.3.2 Securitisation theory and the politics of security*

Securitisation theory presents perhaps the most influential account of how security works and what security does. It was developed by the Copenhagen School (for key texts, see Wæver 1995; Buzan et al. 1998) for conceptualising how and when issues 'become' security issues, and what this does to the issues themselves<sup>14</sup>. Security is defined as a 'speech act' (Wæver, 1995: 55), and securitisation as the discursive process through which,

an issue is dramatized and presented as an issue of supreme priority; thus by labelling it as security an agent claims a need for and a right to treat it by extraordinary means (Buzan et al., 1998: 26)

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<sup>14</sup> As a result, securitisation theory has been used to study the increasing number of issues which have been labelled security issues, or securitised, including the environment, HIV/AIDS and migration (see Floyd 2010; Elbe 2006; Huysmans 2000).

By drawing on Austin's speech-act theory, the Copenhagen School went beyond suggesting that security is constructed, to argue that security has a special quality. A security speech-act is 'performative', not descriptive: to utter security is 'to *do* it' (Austin 1962: 6, emphasis added)<sup>15</sup>. Thus the label 'security' is not simply a reflection of whether an issue *is* a security issue, but is rather a 'political choice' which has specific consequences in terms of how the issue is addressed (Wæver 1995: 65). Securitisation is considered successful if the designated issue is accepted as a threat to security by the relevant audience, to a point where emergency measures are possible<sup>16</sup>. If securitisation is successful, the 'threat' then tends to be addressed in specific ways: 'threat, defense, and often state-centred solutions' (Wæver, 1995: 65). The limitations of securitisation theory have been discussed elsewhere (see Nyman 2013), with key critiques pointing to security constructions beyond speech, including visual representations and physical action, as well as the problematic normative implications of leaving power in the hands of elites (Williams 2003; McDonald 2008; Hansen 2000, 2011; Stritzel 2007; Aradau 2004; Balzacq 2005, 2010). However, securitisation theory has remained central to attempts to understand processes and consequences of security construction.

What really defines a security issue, for the Copenhagen School, is survival: it is 'the survival of the unit *as* a basic political unit – a sovereign state – that is the key' (Wæver 1995: 53). Their definition of security is narrow and fixed, arguing that because of how

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<sup>15</sup> Austin further distinguished between the illocutionary and perlocutionary nature of speech-acts– the former being speech-acts which *do* something by virtue of being spoken, and the latter referring to the effect speech-acts have on the audience or even the speaker him/herself (1962: 101). Likewise, context, or 'circumstances' are key to the performativity of speech-acts, and , often other actions are necessary to accompany speech-act – these could be physical or mental actions, or 'acts of uttering further words' (Austin 1962: 8).

<sup>16</sup> This is more likely if the issue is framed using the grammar of security, if speaker is in a position of authority and if the external context and features of the threat makes the designation seem realistic (Buzan et al. 1998: 25-33).

‘security’ is used in the field of practice, it ‘has to be read through the lens of *national security*’ – it cannot escape its historical connotations (1995: 49). Moreover, it ‘is articulated only from a specific place, in an institutional voice, by elites’ (1995: 57). For Wæver, then, the particularity of security means that desecuritisation is usually preferable (1995: 57). Securitisation theory distinguishes between a realm of normal politics characterised by democratic political procedures, and a realm of security which operates above normal politics. The realm of security is both politics made more intense, and opposed to normal politics, in its urgency and lack of democratic procedures (Buzan et al. 1998: 29). As a result, the Copenhagen School posit that ‘security should be seen as a negative, as a failure to deal with issues as normal politics’ (Buzan et al. 1998: 29). The realm of security thus represents the exception, a ‘logic of war’ with emergency, state-centred ‘threat-defense’ thinking where regular rules do not bind and democratic decision-making procedures do not apply (Wæver 1995: 47-54). Ultimately, ‘...neither individual nor international security exist’ (Wæver 1995: 49). Consequently, most issues are best dealt with outside of the security sphere, or desecuritized. The Copenhagen School’s understanding represents a very particular view of security and its relationship to politics. Taken to its logical extreme, this argument suggests that ‘democratic politics is incompatible with the politics of security’ (Aradau 2004: 399).

In terms of this research, securitisation theory is particularly attractive as it both presents a clear account of the social construction of security and a way to understand how security works, as well as providing the tools for ‘practical security analysis’ (Taureck 2006: 53). However, it also leaves a number of problems. My central research question focuses specifically on how energy security is constructed in the United States and China. My knowledge of the subject area suggests that securitisation does not fully explain how

security works in the case of energy – while it is widely accepted as a security issue in both states and often indeed framed using the language of security as described by the Copenhagen School, it is rarely fully securitised and remains subject to political debate. Emergency measures are rarely possible (for an exception, see Nyman 2014). While some argue that the process of securitisation can occur through slow, bureaucratic processes rather than through elite speech-acts claiming the need for an exception (Bigo 2002; Huysmans 2006, 2011), this still does not explain why energy remains near the top of the security agenda without being fully securitised. Three key problems remain, related to this research.

Firstly, for the purposes of this study, the definition of security used by the Copenhagen School is too narrow and too fixed. Following McDonald and others, I argue here that a lack of distinction between security and securitisation clouds the debate: securitisation ‘should not be viewed as shorthand for the broader construction of security’ (McDonald 2008: 564). Securitisation is seen here as one particular process of security construction, rather than *the* process of security construction. Moreover, the Copenhagen School’s understanding of security-as-securitisation and a ‘logic of existential threat and extreme necessity’ has been linked with a Schmittian understanding of the political as characterised by ‘existential division, of friendship and enmity’ (Williams 2003: 516; see also Huysmans 1998). Thus, Huysmans argues that ‘securitization makes the kind of politics that defines the self on the basis of hostility’ (1998: 576). This is noted by Wæver, who recognises that securitisation theory has a ‘Schmittian concept of security and an Arendtian concept of politics’ (2011: 470)<sup>17</sup>. This ultimately leaves a choice between ‘politics of exceptional measures’ or ‘democratic politics of slow procedures which can be

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<sup>17</sup> While this does leave a choice, as securitisation ‘takes place in a context where there is space for open politics’ (Roe 2012: 255) it leaves no potential for change within the concept of security.

contested' (Aradau 2004: 393). However, security does not have to be exclusionary. In practice, the distinction between politics and security is not so clear: even securitisation itself is more of a 'gradual and incremental' process than the opposite of politics (Abrahamsen 2005: 59; see also McDonald 2012: 5).

In practice, many issues fall in the grey area between regular politics and negative, urgent, security-as-successful-securitisation (see, for example, Huysmans 2011)<sup>18</sup>. These issues can still be issues of security. Moreover, the narrow and fixed interpretation of security used by the Copenhagen School fails to recognise that security also has historically 'positive, non-militarised, and non-statist connotations' (Booth 2007: 165). While it is necessary to recognise that security has often had negative, violent and/or exclusionary connotations, these meanings are not inherent, but 'are themselves the result of social and historical processes, and can thus be changed' (Nunes 2012: 350). Because of their emphasis on dominant security discourses following a logic of national security – which does have clear problems – the Copenhagen School struggle to see security when it does not follow their rules (Browning and McDonald 2013: 14-15). Ultimately, security has no fixed meaning or 'essence' (Ciută 2009: 303-4). Thus, while I agree that *securitisation* does indeed have 'inevitable negative effects' (Wæver 2011: 469), understanding security-as-securitisation neglects security where it does not fit within the Copenhagen School's narrow framework, such as when it is articulated by non-elites, and framed using a different language of security that does not rely on friend/foe distinctions and non-democratic procedures. These alternative security practices are not only overlooked by the securitisation framework, but actively dismissed as irrelevant.

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<sup>18</sup> This grey area is not addressed by the Copenhagen School, and perhaps it doesn't need to be – if we accept that securitisation theory is mostly useful for studying some particular security constructions, rather than expecting it to be an all-encompassing theory of security.

This leads onto the second problem. Because of the specific understanding of security used in securitisation theory, it cannot be used to study these alternative security practices. It limits the study of security-as-securitisation to elite speech-acts following the grammar of securitisation – which, according to Wæver et al, tends to result in threat-defense thinking and state-centred solutions. It privileges a very particular notion of ‘security’ which can only be articulated by those in a position of power (see Hansen 2000; Wilkinson 2007). A focus on dominant voices contributes ‘to the silencing of marginal voices and ignoring the ways in which such actors have attempted precisely to contest these security constructions’ (McDonald 2008: 574). The audience is presented as largely passive, ultimately leaving security to the elites and the exception. Moreover, this overlooks the way in which other actors contest dominant notions of security and threat, articulating alternative concepts of security (McDonald 2008: 575) that may also ‘reveal more non-divisive referents and cooperative practices’ (Roe 2012: 250). Thus following McDonald, this thesis advocates ‘a broader approach to the construction of security’, which in turn ‘lends itself to a concern with locating and acknowledging alternative articulations of security, especially those outlined by marginalised voices’ (McDonald 2008: 565, 2012).

Lastly, the Copenhagen School doesn’t provide a viable normative agenda for this research. Desecuritisation both remains ‘under-theorised’ (Aradau 2004; Hansen 2010), and in some instances, it is ‘logically impossible’ to achieve (Roe 2004: 208). Because of the role secure energy supplies play in ensuring the political, economic and military survival of the state, desecuritisation would be extremely difficult. However, while for the Copenhagen School desecuritisation is the ‘optimal outcome’<sup>19</sup>, working as a ‘normative-

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<sup>19</sup> Even while they define desecuritisation as ‘optimal’, moreover, the Copenhagen School still suggest that securitisation is sometimes necessary ‘in order to block the worst’ (Wæver 2000: 285). Here they leave ‘a silence on which situations call for ‘the responsibility’ to securitize rather than desecuritization; and an absence on the question //which securitizations might be more desirable than others’ (Hansen 2010: 1-2).

political supplement' alongside securitisation as the solution to the Schmittian problem of security (Hansen 2010), desecuritisation is only optimal if we accept their understanding of security. In practice, security is more complex than the Copenhagen School admit. Problematically, while arguing that 'the meaning of a concept lies in its usage and is not something we can define analytically or philosophically according to what would be "best"' (Buzan et al. 1998: 24), Buzan et al simultaneously limit the meaning of security to very *specific* usages by particular actors. If it is not inherently negative, desecuritising energy can be normatively undesirable. As recognised by the Copenhagen School, security can provide mobilising power and resources to deal with issues, and if this power of security is applied outside the narrow framework's notion of security as a negative, it can provide actual potential for change. In the words of Booth, 'desecuritisation can disempower', leading to insecurities being ignored (2007: 168). This is problematic for the agenda forwarded here as it involves essentially giving up on security as a positive value and a potential site of contestation and change (see McDonald 2008: 580). Consequently, it is necessary to engage with security rather than dismissing it. De/securitisation theory cannot explain current energy security practices, nor suggest viable change<sup>20</sup>. The relationship between energy and security is complex, and it rarely follows the Copenhagen School's framework.

Thus, while it provides a useful starting point, there are a number of problems with relying on securitisation theory for this research. One approach to dealing with this would be to revise the theory to make it more suitable to my aims, but this may cause further problems.

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<sup>20</sup> Williams suggests that the emphasis on securitisation as a process of negotiation and acceptance between speaker and audience provides a form of 'discursive ethics' suggesting a desire to avoid the realpolitik of Schmitt's world - particularly as the Copenhagen School also suggest security is best avoided (Williams 2003: 523). However, it still leaves security understood very narrowly, as negative and in opposition to politics – it cannot deal with issues 'positively' within the realm of security. Further, he asks what the political consequences of the Copenhagen School's understanding of security and politics are (2003: 528) - this thesis would argue there are troubling normative implications, as discussed further later.



Likewise, the fact that securitisation theory closes off security as a site for progress is deeply problematic for my research agenda, as desecuritising energy is likely to be difficult, if not impossible in practical terms. This leaves no viable normative agenda. Instead, this thesis argues that securitisation theory presents a narrow, particular understanding of security, rather than *the* understanding of security, following McDonald (2008) and Ciută (2009). Problematically, the Copenhagen School's theoretical definition of security often takes precedence over situated security practice, limiting the study of security to how security works when situated actors 'happen to act in theoretically prescribed ways' (Ciută 2009: 316; Neal 2013: 42). Thus, while claiming that security is 'intersubjective' and what actors make of it, securitisation theory provides 'a yardstick for estimating whether given policies are about security or not, since 'security' is what fulfils the criteria of securitisation, and *nothing else*' (Ciută 2009: 303)<sup>21</sup>. In contrast, it is argued here, following McDonald and Ciută, that something can be a security issue without being 'securitised' as understood by the Copenhagen School. If we instead understand securitisation theory as an analytical framework useful for studying some, but not all, security constructions, it allows us to study issues which do not fit the criteria of securitisation theory, and to recognise that they can still be issues of security.

As the goal here is to study how energy security is constructed, it was necessary to keep an open mind as to how 'security' works<sup>22</sup>. The aim of this research was to provide a meaningful analysis of what is going on in my empirical case studies, how energy is constructed as security, what this means and how it works in different cases – rather than

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<sup>21</sup> It is worth noting that Ciuta uses this insight to suggest securitisation theory take context into account. This paper however, suggests securitisation theory may work better in its original form, but that necessitates separating out understanding and study of 'security' understood more broadly, from security understood as securitisation – which could still then be used to study securitisation as a particular security construction.

<sup>22</sup> There is a debate over the Western-centric nature of securitisation theory, but Juha Vouri (2008) has illustrated possibility of using it to study security in China. This will be discussed in more detail in the next chapter.

studying processes of securitisation. While analysis starts with dominant, state discourses the focus here is on how security is understood (how it is articulated, what is considered a threat, what the suggested solutions are, and what the referent object of security is), rather than assuming that it follows the Copenhagen School's notion. Moreover, this study also includes a search for alternative discourses of energy security, which are not articulated by elites (see chapter 6 for more on this). Following a pragmatic approach, the meaning of security has been kept open rather than fixed. Thus the focus here is on what is happening in the empirical cases studied, following calls by Neal and Wilkinson to put the empirical above theory (Neal 2013; Wilkinson 2013b). Being too wedded to securitisation theory would clearly be problematic with such an approach<sup>23</sup>. Instead, this research has followed Wilkinson, and used securitisation theory as a 'a reference point' – treating it as one of many ways of interpreting security, rather than the only way (2013b: 8)<sup>24</sup>. Thus, whether or not energy is securitised is not a focus – policies are being pursued in the name of security, and the focus is on *how security is understood* in these cases and what policy choices this enables. Securitisation theory provides a reference point for studying how security works, but leaves no normative agenda if desecuritisation is not possible or desirable. The following section considers other normative agendas.

### ***2.3.3 The ethics of energy security: towards a normative agenda***

As noted, this research is underpinned by a commitment to the security of human beings and the environment on which they depend. Traditional security scholars have largely overlooked the ethics of security, rarely reflecting on the concept of security itself and

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<sup>23</sup> Securitisation theory also leaves analysts largely outside of the equation – securitisation is described as a 'political choice' (Wæver 1995: 65) taken by political actors which analysts can then study. However, the term 'political choice' is vague, and it is worth noting that Hansen has suggested it could refer to analysts too (Hansen 2010: 5).

<sup>24</sup> Thus, rather than being 'a "container" or framework that structured and auto-selected empirical content' securitisation theory was used as a guide and a reference point (Wilkinson 2013b: 8).

what it should be, or what form security practices should take. Early peace studies, however, engaged with ethics more directly. Galtung distinguished between positive and negative peace, defining negative peace as the absence of violence/war, and positive peace as ‘the integration of human society’ (1964: 2)<sup>25</sup>. This distinction between negative and positive is also used by Berlin, but differs from the usage of these terms in this research. Here, the term ‘negative’ is used in its more literal sense to denote bad energy security policy, in the sense of policy which does not provide security, and ‘positive’ is used in the same literal sense to denote energy security policy which is deemed ‘better’, providing security for humans and environment. Walker’s early work also considers ethics and security, discussing the ‘nature and possibility of a just world peace’ (1988: 2). He also emphasised the link between ‘ethical claims and conceptions of political community’ (Walker 1993: 51), suggesting that as long as political space remains centred around state sovereignty and framed in exclusive inside/outside terms, it may not be possible to escape the ‘disjunction between ethics and international relations’ (Walker 1993: 64, 1997: 73). Likewise, securing human beings has traditionally been considered to be the role of the state, as a part of protecting individuals from a ‘state of nature’ (Burke 2007: 36-37). This requires recognition of the power of national security discourses. The existence of states is justified by the fact that they are supposed to provide security for their citizens. However, states are often a source of insecurity. While the current state system is problematic in many ways, the state remains the key actor in the security sphere. Likewise, states do have obligations and responsibilities to their people, which, in current energy security policies, they are failing to fulfil. States should not be the referent objects of security as such policies fail to secure, and neither should they be the only actors or speakers of security.

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<sup>25</sup> This was later expanded on to distinguish between negative peace as the absence of personal violence, and positive peace as the absence of structural violence, or *social justice*, understood as a ‘positively defined condition’ (Galtung 1969: 183).

However, they do remain useful as organised actors and as such have potential to be positive security actors.

Following Weldes et al, this research starts with ‘discourses of insecurity...and asks “what do they do?”’ (1999: 10). Indeed, such an approach often means beginning analysis with state discourses. However, it does not require ending there. In terms of opening up the possibility for change, this research draws on critical constructivist notions of discourse as ‘unfixed’, meaning there is always space for change (Doty 1996: 6). It also draws more directly on McDonald, who emphasises the contested nature of ‘security’ by locating alternative, marginalised security practices (2012). This is particularly helpful for the pragmatic focus of this research, as it allows the normative agenda to focus on locating potential for change in existing practices. Vitally, it enables a positive energy security to harness the power in ‘security’, recognising that ‘it is not necessary to reject the concept of security in order to think about peace and justice; just the particular understanding of security through which the concept has more or less been turned into its opposite’ (Walker 1988: 161).

Studying the ethics of security implies a normative approach, as it necessitates the analyst both evaluating security and making some form of judgement about what security *should*, or *shouldn't*, be about.<sup>26</sup> Consequently, compared with traditional security studies, it involves a different approach towards the role of the analyst/s, as being ‘active participants in the security discussion’ (Hoogensen Gjørsv 2012: 851). This also requires recognition that ‘the securitisation[/security] analyst in writing (speaking) about a particular social reality is in part responsible for the co-constitution of this very reality’ (Floyd 2010: 47).

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<sup>26</sup> For an in-depth discussion on how the role of the analyst has been addressed in security studies, see Eriksson (1999).

More recently, work explicitly addressing the ethics of security has taken a range of forms<sup>27</sup>; this section will focus on the Welsh School of security studies, while also drawing on Walker and Linklater to build on this, as these have been most useful for addressing my questions. The emerging literature on positive/negative security will also be discussed in the following section as a key influence on this research.

As noted in the previous section, while the Copenhagen School is deeply concerned with normative questions<sup>28</sup>, expressing a preference for desecuritisation (Wæver 2000: 253), their reliance on a narrow a fixed notion of security as inherently negative leaves no room for change within security. In contrast, the Welsh School of security studies, sometimes referred to as Critical Security Studies, suggest that security should be seen as a positive value, defining security as emancipation (Booth 1991, 2005a, 2007; Wyn Jones 1999). Booth defines emancipation as ‘the freeing of people...from those physical and human constraints which stop them carrying out what they would freely choose to do...Emancipation, theoretically, is security’ (1991: 319), while Wyn Jones has defined it as ‘some notion of the existence of possibilities for progressive alternatives’ (2005: 217). The Welsh School’s commitment to security-as-emancipation draws on critical theory and is underpinned by a strong normative commitment to ‘thinking about security from the perspective of those people(s) without power – those who have been traditionally silenced by prevailing structures’ (Booth 2005a: 14). This emphasis on power allows a recognition that many securities and insecurities which are not articulated by elites are neglected by the Copenhagen School. It also enables a recognition of the role of analysts in advocating change (Eriksson 1999: 318), and reprioritises the referent object to security to argue that

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<sup>27</sup> This also includes work on human security, for a full discussion of its largely ‘uncritical conceptual underpinnings’ see Newman (2010). While it shifts the referent object of security it has problematic baggage and has historically been linked to closely with development agendas, which is less useful for this research. For a fuller treatment of some of these issues, see also Burke (2010).

<sup>28</sup> In particular, see Wæver’s discussion of East European social movements (Wæver 1995: 77).

‘individual humans are the ultimate referent’ (Booth 1991: 319). However, while providing some important insights and normative critiques of security practice, emancipation is vague and difficult to implement, particularly from a security policy perspective, though some of the ideas underpinning emancipation are useful for conceptualising security more positively. Ideas of ‘progress’, ‘emancipation’ and ‘freedom’ are noble in themselves, but problematic in power-terms. Booth’s notion of emancipation in particular is too universalistic and not grounded in political practice. Abstract ideas about the ‘freeing of people’ and ‘thinking about security *from the perspective of* those people(s) without power’ would involve both mindreading and imposing action and freedom/emancipation on people who would remain passive referents of security, rather than involving them in the process and giving them power to speak security themselves.

The question often raised regarding emancipation and security, is ‘whether emancipation [read security as...] can be at nobody’s expense’ (Peoples 2010: 1129). This is similar to Aradau’s rejection of security as inherently exclusionary, meaning that we cannot all be ‘equal sharers of security’ (2008: 73)<sup>29</sup>. This is based on an assumption that security relies on the existence of insecurity and a threatening ‘other’ that needs to be secured against. However, if security is seen as a positive value rather than just the absence of threat, the opposite of security is no longer insecurity. The exclusionary nature of (national) security is heavily related to its reliance on binary identities. However, while these practices are entrenched, ‘once upon a time, the world was not as it is. The patterns of inclusion and exclusion we now take for granted are historical innovations’ (Walker 1993: 179), and can therefore be challenged. Booth’s approach to this involves rejecting us/them, ‘mono-

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<sup>29</sup> It is important to mention that Aradau’s book focuses on trafficking, and as such security may work very differently in this context.

factoral' identity labels in favour of multiple, overlapping identities (Booth 2007: 138-40). Linklater provides a more in-depth and practical argument for moving beyond exclusionary Westphalian states based on difference and exclusion to transform identity and political communities (1998). He makes the argument that 'globalisation and fragmentation erode traditional conceptions of community and reduce the moral significance of national boundaries' (Linklater 1998: 5). Vitaly, people living in modern states have a 'dual identity as citizens and as human beings' (Linklater 1998: 179). Taken to its logical conclusion, such an argument advocates some form of cosmopolitanism or common security (Linklater 1998; Burke et al. 2013)<sup>30</sup>. Of course, states continue to exist, but increasing integration and globalisation makes it more and more difficult for states to justify securing their own citizens at the expense of others. Most importantly, if identities are increasingly seen not in binary terms, but as multiple and overlapping and even crossing state boundaries, the binary distinction between 'us' and 'them' becomes blurred and it becomes harder to represent security in exclusionary terms.

For the Welsh School the power of security is recognised as a useful tool for change. However, emancipation in its traditional forms clearly has some problems. While Booth argues in favour of securing individuals, these individuals are passive. Likewise, viewing security as emancipation and therefore as an inherently positive value is deeply problematic. Like the Copenhagen School, it suggests that the value of security is fixed. While recognising problems with the way in which security has been used, the Welsh School's interpretation still does not fully recognise the contextual nature of security. However, McDonald presents a more critical and reflexive notion of emancipation that is grounded in 'alternative security' practices to highlight the potential for security as a site

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<sup>30</sup> However, cosmopolitan security would be very difficult to combine with a study of energy security, as it relies on a global security governance framework which, when it comes to energy security, does not exist.

of contestation and, therefore, change (2012)<sup>31</sup>. Wyn Jones has presented a similar focus, drawing on Habermas in suggesting the need to emphasise locating and outlining 'concrete utopias' (2005: 223; 1999: 76-8). Drawing on the Frankfurt School and immanent critique, he warns against the 'temptation of suggesting a blueprint for an emancipated order that is unrelated to the possibilities inherent in the present' (Wyn Jones 1999: 77). This is linked to practical potential of achieving change and convincing the target audience that change is both possible and achievable, thus 'for both epistemological and purely instrumental reasons, concrete utopias must be based on practices that have some basis in pre-existing behaviour' (Wyn Jones 1999: 77). Moreover, to avoid presenting a totalising metanarrative or a theory that becomes reified and loses any critical edge, it is necessary to conceive of emancipation as 'a process rather than an endpoint' (Wyn Jones 1999: 78). As such it can be a reflexive notion of progress that develops conceptually. This is essential when moving beyond critique to reconstruction. On similar lines, Peoples' emphasises the notion of 'resistance' over emancipation or liberation (2010: 1133). Rather than imposing an abstract notion of emancipation, therefore, the emphasis here is on resistance and contestation – alternative practices – and giving marginalised voices the power to speak security, without ignoring traditional voices. Here, this thesis follows McDonald's revised understanding of emancipation, which defines it as 'as a process of freeing up space for dialogue and deliberation – the diffusion of power to "speak" security' (2007: 2). This also opens up security as a concept, rather than closing it off. Ultimately, recognising that security is contested rather than fixed provides potential for change.

However, a similar focus on the contextual meaning of security has been emphasised by Ciută (2009) and by Browning and McDonald (2013) without reference to 'emancipation'

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<sup>31</sup> Critical constructivists have often been somewhat too focused on state discourses, but McDonald provides a useful antidote here.



which clearly has some problematic baggage. Consequently, this research will use a similar approach, differentiating between security and emancipation but drawing on the positive notion of security that underlies thinking on emancipation. As such, the term ‘positive security’ will be used instead, which will be discussed more in the following section and in chapter six. In terms of referents, the problems of Booth’s notion of individual security have already been noted. In contrast, Walker has emphasised critical social movements as suggesting ‘that what counts now is less the existing rigidities of power than the possibility of empowering people in their everyday lives’ (1988: 156). Like Booth, Walker emphasises the way in which ‘the primary subject of security is people – not states, nor elites, nor the affluent, nor the stronger’ (1988: 128). Vitaly, he distinguishes between securing citizens of states and people in general as focusing on citizens necessitates continuing exclusion and insecurity (Walker 1988: 121). However, he also recognises the potential for changing the meaning of security rather than rejecting it (Walker 1988: 161). Dalby draws on critical geopolitics to highlight similar patterns of inside/outside distinctions, asking how these have ‘worked to both facilitate some political possibilities and actions and exclude and silence others’ (2010: 51). This is particularly problematic in a contemporary context. State pursuit of (national) security not only perpetuates insecurity for people in general, which is problematic in itself: we are also facing increasing cross-border insecurity issues, including climate change, which cannot be dealt with in zero-sum terms. Ironically, when it comes to climate change ‘the threat that we need to face is our own doing, not something that can be pinned on an external military or a state with evil intent’ (Dalby 2009: 92). Meanwhile, as human activities and geological change are increasingly affecting each other, the security of human beings is inextricably bound up with stable and secure global ecosystems (Dalby 2009).

Considering what a more ethical, positive or valuable energy security might look like is an essential part of this project. Envisioning the future is important, and though often ignored it is increasingly recognised by constructivist researchers (see Berenskoetter 2011). Ultimately, ‘visions motivate actors to realize, or prevent, possibilities of being in the world’ (Berenskoetter 2011: 648). Thus they work to ‘make the future meaningful and to lay out possibilities of being in the world’ (Berenskoetter 2011: 648). Problematically, while critical approaches to security have been concerned with both the politics and ethics of security, they have tended to assume that there is a ‘universal security logic’, while disagreeing about whether it is positive or negative (Browning and McDonald 2013: 2). As a result, they do not really provide any clear potential for changing the meaning of security. The last part of this section considers the emerging literature on positive/negative security, which draws on the approaches discussed here.

### ***2.3.4 The positive/negative security debate***

Emerging debates on the ethics of security increasingly go beyond emancipation and securitisation, evaluating whether security itself is negative or whether it is, or can be, a positive value (see Roe 2008, 2012; Hoogensen Gjørsv 2012; Floyd 2007, 2011). As traditionally understood, security is ‘nothing but the absence of the evil of insecurity, a negative value so to speak’ (Wolfers 1962: 153). Defined as the absence of threat, security is essentially a ‘lack’. However, the emerging debate draws also on both Galtung’s notion of positive/negative peace, and Isaiah Berlin’s distinction between negative and positive freedom, which are well established in the discipline. In this sense, negative security equates to “security from” (a threat), and positive security as “security to”, or enabling’

(Hoogensen Gjørsv 2012: 836; also Roe 2008: 778)<sup>32</sup>. As noted in the previous section, this research uses the terms negative and positive in their more literal sense. Problematically, despite increasing literature on positive/negative security, there are clear variations between key authors in how they define the terms. They often emphasise different aspects, but this is rarely made explicit.

Firstly, these authors rely heavily on securitisation theory, rarely distinguishing between security and securitisation (in particular, see Roe 2012; Floyd 2007, 2011). Thus the positive/negative security debate cannot be removed from debates on securitisation, and more particularly, normative critiques of securitisation (Roe 2012: 2). Many arguments suggesting security is negative are rooted in an acceptance of the Copenhagen School's understanding of security. Following these, security is negative because of its *processes* (non-democratic, fast-tracked procedures) and its *outcomes* (reproduction of threat-defence, friend/enemy dichotomies) (for more on this, see Roe 2012: 2). Vitaly, just like the approach taken here, this designation of security as negative refers to something other than simply the 'absence of threat', viewing instead negative security as involving negative or problematic processes and outcomes. However, the conflation of these two different uses of 'negative' are never discussed by these authors. The varying notions of positive security presented tend to emphasise enabling values, in some ways similar to emancipation, including individual human needs and ontological security (McSweeney 1999), trust (Hoogensen Gjørsv 2012), just values (Roe 2008), or positive outcomes (Floyd 2007).

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<sup>32</sup> Interestingly, Booth uses a similar distinction, though without the labels positive and negative, defining security as the 'absence of threat' and emancipation as the enabling, positive concept, arguing that they are 'two sides of the same coin', so true security requires both (Booth 1991: 319).

McSweeney suggests that security has two images. ‘Security’ is more negative, denoting an absence of threat but there is also an alternative ‘positive image’ as the term ‘secure’ resides at a more human level, suggesting ‘enabling, making something possible’ and has clear ‘positive connotations’ (McSweeney 1999: 14). He similarly draws on Berlin in this distinction. He suggests both images are necessary to make sense of security – it ‘must make sense at the basic level of the individual human being for it to make sense at the international level’ (McSweeney 1999: 16). Roe, drawing on McSweeney, takes this further to suggest that the more positive content of security resides not only at the human level: ‘other entities, especially the state, can, and indeed *should*, pursue positive security’ (Roe 2008: 779, emphasis original). For Roe, positive security is more than protecting core values (which has been argued by McDonald 2012: though without the label ‘positive security’). It is about maintaining ‘*just*, core values’ (Roe 2008: 793, emphasis added). Following this, he differentiates between positive and negative in terms of ‘a normative judgement over the values that are pursued [by states, in the name of security], suggesting that positive values be defined according to the promotion of “justice”’ (Roe 2008: 779). In this process he also draws on Galtung and notions of common security, using positive to refer to the ‘pursuit of a more ‘just’ world order’ (Roe 2008: 791).

In contrast, Hoogensen emphasises the role of actors, suggesting that negative security is hierarchical, rendering ‘passive any possible agents of security outside of the state’ (2012: 842). Again, the use of ‘negative’ conflates the literal meaning with the ‘security-from/absence of threat’ meaning – which is particularly confusing as Hoogensen draws directly on Berlin’s distinction between the terms. Meanwhile, positive security is understood as centred on trust, as ‘multi-actor’ with actors above and below the state as well as active referents (2012). In this way, her approach ‘makes the practices of

individuals and communities visible to the political world' (Hoogensen Gjørsv 2012: 858). Like McSweeney she draws on Berlin to suggest that positive and negative security can work together, though at times she also appears to suggest that negative security is 'bad', as in the first quote of this paragraph.

Floyd takes a different approach, focusing directly on securitisation and desecuritisation. She uses the terms positive and negative to describe 'how well any given security policy addresses the insecurity in question' (Floyd 2007: 338), which is much closer to the way these terms are used here. She usefully highlights that the consequences of securitisation are not always exclusionary or divisive, particularly in the environmental sector (Floyd 2010: 193). While filling a problematic gap in securitisation theory, this approach is not that useful here as energy is rarely securitised. Floyd assesses securitisations and desecuritisations/politicisations of issues in the environmental security sector on the basis of whether or not the insecurity in question is addressed. However, her approach is closely linked with the Copenhagen School's distinction between the spheres of politics and security, and also their division of security issues into sectors. Both of these present problems for this research. Floyd suggests that a positive securitisation is 'faster, better' and more efficient than politicisation (Floyd 2007: 342). She thus still subscribes to the Copenhagen School's binary distinction between security and politics processes. Using the case of energy security, I would argue this distinction is often blurred. Likewise, she continues the Copenhagen School's focus on elites as the 'speakers' and users of security, who need to be watched, as they may 'abuse' that power (Floyd 2007: 344), whereas this research wants to look also at non-state discourses of energy security. While she puts forward a clear and useful agenda to judge security by 'the maximisation of genuine security' (recognising that 'security is neither always positive nor always negative but

rather issue dependent'), she suggests approaching the differences between security discourses through the Copenhagen School's framework of sectors (Floyd 2007: 339). She acknowledges that sectors other than the environmental are likely to face different problems, including the possibility that 'one actor's security is another actor's insecurity' (Floyd 2007: 340). But as her work deals only with the environmental sector, this discussion is not taken further. In the environmental sector, it is easier to judge a policy based on whether or not it addresses the environmental insecurity it intended to address. However, energy security is more complicated. It doesn't fit neatly into a sector, and the referent object is almost always the state, while reproducing insecurity for states themselves, human beings and the environment. Moreover, focusing on consequences neglects the role of processes and referents of security as factors which affect the value of security policy (though Floyd addresses this more in later work. See in particular Floyd 2011: 431).

All of these approaches have their merits, particularly in starting a discussion on the value of security and securitisation. This, in turn, helps to highlight the 'complexity of security' rather than close off the debate (Hoogensen and Rottem 2004: 169). However, they neglect the role of practice, which will be discussed in more detail in the next section. Apart from Hoogensen, these authors also continue the Copenhagen School's problematic focus on elites as the only actors/speakers of security. The (often inconsistent) reliance on Berlin/Galtung's notions of positive/negative is also problematic for this research. It fails to fully recognise the very problematic consequences of security in its negative sense, as highlighted by securitisation theory – although these are at times hinted at, they are rarely addressed explicitly. The emphasis in this project is on locating positive notions of energy security in existing practices, rather than developing abstract criteria. This also follows the

approach to studying security outlined by Wilkinson and Neal, discussed earlier. The final section discusses this approach in more detail.

### ***2.3.5 Analysing the value of energy security in context***

Both the Welsh School and the Copenhagen School view the meaning and value of security as fixed. However, viewing meaning as socially constructed, it is never fully fixed, and thus security has no ‘essence’ (Ciută 2009). Language is fluid and constantly evolving, and all representations and discourses can be contested which means that there is always space for change (Doty 1996: 6). Security means ‘different things to different groups in different contexts’ (McDonald 2012: 11). Moreover, if security has no universal, fixed logic or essence, it cannot be inherently negative or positive. Consequently, a theoretical, ‘fixed’ definition of the value of security ‘risks clouding out detail’ (Neal 2013: 43). As shown in the emerging positive/negative literature, some security constructions are more positive and some are more negative. However, this literature is often abstract rather than grounded in practice, though it does provide some indication of potential differences between positive and negative security. However, following both the methodological and analytical approach outlined here, I argue that for advocating a change in security policy towards more positive practices, it is essential to study/locate alternative positive energy security constructions in an empirical context. This follows both Cox notion of feasibility and Wyn Jones’ promotion of ‘concrete utopias’ as ‘based on practices that have some basis in pre-existing behaviour’ (1999: 77). Likewise, it follows the focus on the contested nature of energy security. Security is constructed in a number of ways; some of these constructions have more positive value, while others are more negative. Thus to analyse the value of security it is necessary to look at how security works in particular contexts, looking at actual existing practices and analysing ‘how security itself is

understood' (McDonald 2012: 7). Ultimately, security can never be unequivocally 'good' or 'bad', but is always contextual and always changing. This does not mean that it cannot or should not be studied – if anything, it makes the study of how security works in different contexts even more imperative.

In practice, security is contested: 'security discourses are a product of a process of negotiation between political actors and the broader political community' (McDonald 2012: 17). The unfixed and contextual nature of security also opens up potential for change. This research thus follows McDonald's approach of highlighting the contested nature of energy security by looking at alternative, marginalised discourses as well as dominant ones to highlight the variation in how security is used by different actors to open up the space for change (see McDonald 2012)<sup>33</sup>. Doty has noted the unwieldiness of language, arguing that elites cannot simply control it in a 'one-way instrumental process' (Doty 1998: 4). A similar argument has been forwarded by Trombetta, who highlights the reflexive nature of security, suggesting that in climate discourses 'appeals to security have emphasised the relevance of preventive, non-confrontational measures and the importance of other actors than states in providing security' (2008: 600). Climate security has 'avoided the identification of enemies and has involved actors other than states, both in the securitizing moves and in the security provisions' (2008: 598). Her research ultimately shows that speaking or producing security is not a one-way process, but 'a reflexive and contextualised process that generates meanings and practices' (2008: 600). Though energy security differs from climate security in that official energy security practices are very closely linked with a negative national security logic, I argue here that potential for change can be found in alternative discourses outside of state discourses, where even an issue as

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<sup>33</sup> This also avoids the problems identified with Booth's notion of emancipation, looking for existing contestations and resistance to the dominant understanding of energy security in the discursive space instead of imposing an abstract notion of emancipation.



linked with negative security as energy security can be found to be articulated in more positive terms. The research agenda here therefore draws on the contested meanings of energy security already out there in the discursive space, focusing on those articulating a more positive notion of security, as the basis for changing dominant discourse and policy on energy security. In turn, this could work to ‘transform existing security practices’ (Trombetta 2008: 587; see also Huysmans 2002: 59).

Security used in this way can be a powerful tool for change. Mulligan has questioned ‘whether the discursive environment is amenable to a new understanding of the relationship between energy, the environment, and security’ (Mulligan 2010: 90-91). However, the range of discourses presented in chapters four, five and six, as well as the growing literature advocating broadening the concept of energy security discussed in the previous chapter, suggests the concept of energy security is increasingly contested. Ciută has taken this even further to suggest that energy is ‘a *total* field’ as ‘nothing exists that is not energy, or not affected by energy. Energy security is therefore a homologous field, which means that security ceases to be a bounded domain of meaning and practice’ (Ciută 2010: 124). However, as shown both in the previous chapters’ discussion of the mainstream literature and in chapters four and five, state energy security discourses contain key unifying themes. This also requires a research strategy of looking directly for more positive, alternative notions of energy security that contest dominant understandings, which is discussed in more detail in the following chapter and in chapter six.

Some key questions remain. How have more positive notions of energy security been identified or selected? What criteria have been used in this process, given the need to take a contextualised approach grounded in practice with open concepts to avoid limiting

analysis? This will be discussed in more detail in the following chapter. The search was undertaken with the suggestions put forward by McDonald, Roe, Hoogensen and Floyd in mind, emphasising multiple actors and active audiences to look directly at non-state advocacy groups contesting official notions of energy security by drawing on the need to secure human beings and ecosystems, phrased in non-exclusionary terms. Referent objects and actors have been key here<sup>34</sup>. Following this, security can also contain positive value, enabling and maintaining values the actor considers important, as well as the freedom to act and to define those values. McDonald draws on similar ideas, defining security as ‘a site of contestation over the definition of a group’s core values, threats to those values, and the means through which they are to be defended or advanced’ (2012: 5). However, this is somewhat problematic as McDonald provides little clarity in terms of which values are more ‘emancipatory’ or ‘positive’<sup>35</sup>. My understanding of positive security also draws on the Welsh School’s emancipation. For this kind of positive security some form of open political order is necessary to allow broader agency beyond elite-state actors to both define and speak security and to secure, though this does not necessarily have to equal Western democracy. In the words of Booth’s more recent contribution, positive security ‘enables people(s) some opportunity to choose how to live’ (2005b: 23). Positive security needs to look beyond the state both in terms of referents and to allow other actors to speak security – though the state remains a powerful actor and can, and should, itself also pursue positive security. Positive security policy should not produce insecurity, which necessitates wider and more active referents as well as other actors alongside the state. Finally, it is vital to stop seeing security itself in binary terms as positive/negative, recognising the full

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<sup>34</sup> Huysmans notes that the Copenhagen School’s emphasis on sectors of security in the 1998 book implies that the referent of security is an empirical question rather than a normative one (Huysmans 1998: 490), which this thesis would argue is problematic.

<sup>35</sup> McDonald makes no ethical distinction between different ‘core values’ – presumably, not all values are ‘just’, ‘emancipatory’ or ‘positive’. Values are not defined or distinguished between in his aim to open up contestation over security, which is problematic as some values are negative.

spectrum and variation of security, and working instead towards more positive security. As part of this, I argue that positive security constructions have to be non-exclusive in terms of referents, securing human beings in general rather than citizens of states, as well as the ecosystems they depend on to survive<sup>36</sup>.

## 2.4 Conclusion

This chapter has presented a necessarily limited review of the conceptual literature on security, focusing selectively on the literature that has been most useful for addressing my research questions and for understanding how energy security is constituted in the United States and China, with a focus on the role of ‘security’ in this process. It has made the case for understanding security as unfixed, both in meaning and in terms of value, arguing in favour of a contextualised and pragmatic approach to understand my empirical case studies. In many ways, this answers a recent call for critical security scholars to move beyond current paradigms and universalised assumptions about security ‘to engage in nuanced, reflexive and context-specific analyses of the politics and ethics of security’ (Browning and McDonald 2013: 14). The chapter also brings together literature on emancipation with the debate over the value of security and calls for contextual analyses of security constructions to develop a framework for evaluating the value of security in context. As part of a wider critical security studies agenda, this thesis questions the way the vast majority of literature on energy security relies on a traditional logic of security, suggesting that this understanding of security is not only insufficient, but likely to cause insecurity for states, individuals and the environment in which they live. This argument is used to further a normative agenda of locating and drawing out alternative more positive

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<sup>36</sup> Interestingly, this understanding of positive security is quite similar to the Copenhagen School’s understanding of desecuritisation (Wæver 2011: 470), though they would argue that positive security understood this way is not possible because of the negative logic of security.

energy security practices to both highlight the contested and changeable nature of security and to use the positive potential in security. Chapter six presents these alternative discourses, together with a fuller discussion of negative and positive energy security.

The next chapter will go into more detail in terms of the research design and methods used in this process. It is important to recognise that ‘security is always powerful and never inconsequential, no matter how messy, frivolous or inconsistent the actors’ use of the word may be’ (Ciută 2009: 310). Energy security is an increasing cause of ‘geopolitical tensions and conflicts’ (Dannreuther 2010: 144), but has largely escaped critical interrogation. This research presents the first in-depth critical empirical analysis of energy security constructions, going beyond abstract calls to redefine security to analyse how it is used and what security itself means in different constructions, drawing on alternative, positive constructions to illustrate and open up the space for change.

## CHAPTER 3

## Research design and methods

### 3.1 Research Design

Any research involves a number of choices in terms of research design, ‘to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible’ (De Vaus 2001: 9). These choices include both *what* to analyse (research design) and *how* to collect and analyse it (research methods). Some of these choices and their underlying motivations have been discussed in the previous chapters, but will here be discussed in terms of the practical impact they had, firstly on research design, and then on research methods. In some cases, these choices appear obvious – flowing naturally from the cases chosen and the methodological ‘wagers’ and assumptions of the researcher (as discussed in chapter two). However, it is still important to acknowledge these as choices. Though the focus of the research project itself makes some choices straightforward, others are more difficult to judge. However, research design is ‘an on-going and flexible process’ (Squire 2013: 40) which evolves throughout the research. This chapter draws on Salter and Mutlu (2013), Hansen (2006) and Wilkinson (2013b) as well as work on research design from interpretive international relations and social sciences more broadly. The discussion on research design begins with an outline of some core principles of interpretive research design, linking these to my research questions and the aims of my research. It then discusses using case study analysis, choice of cases and choice of discourses to study, linking this with my normative agenda and the role of power. The final part of the research

design section links this with a pragmatic and reflexive agenda, and a discussion of practical issues affecting research design. This is then followed by a section on research methods.

Salter outlines three key principles of ‘good’ research design: clear research questions and design, use of appropriate research methods, and reflexivity in terms of the role of the researcher in the research process (Salter 2013: 15). Because interpretive research design is not concerned with hypothesis testing and empiricist causality, replicability is not a useful measure of a ‘good’ research design (Schwartz-Shea and Yanow 2012: 94). Rather, the focus is on reflexivity, clarity and openness about choices made during the research process (Salter 2013: 15). Reflexivity requires acknowledging the role of the researcher in the research process and in interpreting the data<sup>1</sup>. The position(ality) of the researcher ‘influence[s] both one’s unquestioned assumptions, one’s access, and the way that others relate’ (Salter 2013: 20). This is particularly important when discussing research design and methods, and in a sense involves writing the researcher ‘back in’ (Wilkinson 2013b).

This research is driven by the need to look at the concept of energy security and how it works in an empirical context. Problematically, the existing literature accepts both the meaning and the value of energy security as given. It does not question whether energy is a security issue, nor what it means to speak and/or write ‘security’ in the context of energy. As such, the focus here is on investigating how energy security is represented and practiced, in short, how it is constituted; and how security works in this process. Following these aims, my central research question is:

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<sup>1</sup> For a more extensive discussion on the need for reflexivity in interpretive research design, see Yanow and Schwartz-Shea (2012: 100).

- How is energy security constructed in discourse and practice in the US and China?

My focus on the relationship between energy and security has led to the following sub-questions:

- What does it mean to attach ‘security’ to energy?
- What is the value of (energy) security?
- *Should* security be attached to energy?

The empirical focus on the United States and China lends itself to a case study-based research design. Before discussing this in more detail, it is worth repeating that in using the word *constructed*, I draw on Hansen’s notion of discourse and practice as being ‘co-constituted’ – representations and policy enable each other (2006: 28). Thus, the focus is on how energy security is constructed, or constituted<sup>2</sup>, through representations *and* policy.

Case study analysis is the research design most suitable for this research project as it will allow me to investigate how energy security is constructed in my specific cases to create in-depth, empirically rich analysis. ‘Cases’ can be defined in a range of ways; for example Abbott defines it as an ‘agent’, asking ‘what cases do’ (Abbott 1992: 53), and George and Bennett as ‘an instance of a “class of events”’ (George and Bennett 2005: 17). Whichever approach is used, the cases are ‘the “object” of study’ (De Vaus 2001: 220). Moreover, ‘most research involves multiple uses of cases...because research combines theoretical and empirical analysis’ (Ragin 1992: 11). In this sense, my cases are both the two states under study (the US and China) and the specific *constructions* of energy security being studied in

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<sup>2</sup> I use the words constituted and constructed interchangeably as I see discourse and practice linked.

the cases. The key problems identified with case study analysis in the literature are ‘case selection and the danger of selection bias’, and ‘tension between parsimony and richness in selecting the number of variables and cases to be studied’ (Bennett 2004: 19; see also Klotz 2008). However, all research necessarily has selection bias because of the central role of the researcher in both defining the questions to be answered and the way in which they are to be answered. Moreover, a case study design will contribute conceptual validity, allowing ‘for conceptual refinements with a higher level of validity over a smaller number of cases’ (George and Bennett 2005: 19). This does make generalisation a problem, but this is not a goal of this research, as discussed in the methodology section in the previous chapter. It is important to note that because I am not looking at causal relationships but rather at the constitutive relationship between discourse and policy, the empirical chapters are in this sense not a test of a hypothesis but an ‘application of the theory’ (Hansen, 2006: 11) and an examination of ‘a more complex web of facilitating conditions’ (Salter 2013: 16) that make particular choices possible.

Because of my interest in analysing constructions of energy as security and what security means and does to energy, I decided to focus the empirical analysis on the United States and China, as they are the top two energy consumers and oil importers globally, which makes them particularly vulnerable to energy (in)security issues. This follows Friedrichs and Kratochwil’s ‘most-important’ case design, which aims to help conceptual clarity (2009: 718). The analysis starts in 2004, as the year of ‘the global demand shock’ which saw an unexpected and unprecedented global increase in oil consumption<sup>3</sup> (Yergin 2011b: 193). The effect on global energy supply and markets placed energy at the top of national security agendas. Starting analysis in 2004 also enabled a contemporary focus, while

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<sup>3</sup> The demand shock was caused partly by growing Chinese energy demands, though many countries – including the United States – saw increased consumption rates (Yergin 2011b: 193).



providing a long enough time period to study to show continuity in how energy security is constructed. Rather than focusing on particular events during these time periods, constructions of energy security were traced over time to create a typology, drawing out key themes in how energy security has been constructed. This also provided a clearer and more general picture of how energy security has been constructed in my cases to increase understanding of the concept of energy security more broadly. For practical reasons, the empirical material ends in 2012. Because of the relatively short time period under study and because of the thematic focus, the empirical chapters present the material analysed thematically rather than chronologically. This also avoided repetition, as constructions were surprisingly consistent over time. However, any deviations from this pattern are noted where relevant. Chapters four and five present state discourses, while chapter six presents both a discussion of these (relating them to the debate over the value of security introduced in chapter two) and an analysis and discussion of alternative discourses which contest dominant notions of energy security in both states.

In terms of research design, choices also had to be made in terms of which discourses to analyse (Hansen 2006: 75). Some contextual and historical information was necessary to make sense of the discourse and policy, so this became the starting point. This included the history of energy consumption and production as well as of energy policy-making in both states. In terms of primary material, the starting focus was official discourse, as it has the most impact on policy choices. However, official discourse is produced in a number of venues. I focused on presidential and ministerial speeches and statements, bills and legislation as well as other texts produced by administrations where the primary focus was energy security. Analysis included key texts frequently quoted and referred to as these work to organise the debate, as well as the ‘larger body of more general material’ (Hansen

2006: 82). This was selected on three criteria: texts had to articulate policies (and in this case, the concept of energy security) clearly; they had to be ‘widely read’ and paid attention to; and ‘have the formal authority to define a political position’ (Hansen 2006: 85). What is included and important in terms of general material varies between empirical contexts (Hansen 2006: 86) – for example, for the study of China I used some media sources as a form of official discourse because of censorship practices (which will be discussed in more detail under methods). A range of texts is central – while the US research entailed analysing a lot of presidential speeches on energy security, legislation, documents and statements from relevant departments complemented this. The academic literature analysed in the first chapter is also a form of primary data, being influenced by, and influencing, policy debate. Overall, energy security was found to be constructed and defined by elite actors working in various parts of the security establishment, with little or no input from non-elite, non-state actors, or even from other government departments working on related issues such as climate security.

However, the normative agenda of this research also required going beyond official discourses to find competing, more positive notions of energy security that contest official constructions. Thus, while analysis began with official discourses, it then moved on to analyse marginalised, alternative and competing notions of energy security in the discursive space in both states. Broadening the scope from official discourse ‘to capture discourses that contest and challenge’ also helps assess ‘the hegemony of official discourse’ (Hansen 2006: 74) and open up space for change by disrupting ‘common sense’ understandings (Milliken 1999: 229). This also involved a consideration of power, understood not as narrow military capability or wider influence/hegemony, but as a relation manifest in practice. This involves looking at ‘the way in which power works to

constitute particular modes of subjectivity and interpretive dispositions’ (Doty 1993: 299)<sup>4</sup>. Ultimately official discourse can limit discursive possibilities by silencing voices outside of the accepted discursive borders, and through the construction of ‘common sense’ understandings. In this way ‘international relations are inextricably bound up with discursive practices that put into circulation representations that are taken as “truth”’ (Doty 1996: 5). As such, there is a need to ‘examine *how* certain representations underlie the production of knowledge and identities and how these representations make various courses of action possible’ (Doty 1996: 5). In the case of energy security this has involved a silencing of voices that question the dominant representations of energy security.

Looking at power relations is vital here. In showing that ‘the present conjuncture, far from being the only natural or possible societal order, is the expression of a certain configuration of power relations’ these power relations ‘can be challenged’ (Laclau and Mouffe 2001: xvi). In this way, the research moved between official and marginalised constructions to illustrate the contested nature of energy security, opening up the meaning and providing potential for change. Thus chapters four and five present official constructions in the United States and China respectively, while chapter six presents alternative, marginalised constructions, focusing on non-governmental groups articulating more positive notions of energy security. This involved actively looking for more positive constructions of energy security. The previous chapter outlined some of the criteria used as a starting point to judge what more positive constructions might look like, though the criteria were kept as open as possible to avoid limiting analysis. This search was also helped by the presence of some more positive elements in official discourses as discussed in chapters four and five. In practical terms, marginal discourses are harder to locate, and

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<sup>4</sup> Most traditional understandings of energy security, in particular realist/strategic analyses, also place a heavy emphasis on power, but analyse power in a very different way. They analyse state power in the anarchic international system, whereas this thesis looks at representation as power and power as productive.

thus analysis was limited by what was available (Hansen 2006: 87). In identifying competing constructions within each state, this part of the research was in a sense comparative, comparing competing discourses to emphasise the contested nature of energy security.

In terms of data selection, my case study analysis aims to maximise theoretical understanding instead of representativeness for purposes of generalisation (Arber 2001: 59). Consequently I used ‘focused or judgemental sampling’ of representations of energy security in the US and China in the specified time period, allowing me to select cases to ‘maximise understanding of social processes’ (Arber 2001: 61). However, to ensure all key dominant themes were captured in terms of official constructions of energy security, analysis was continued until no further themes were discovered. Key texts were identified by reading broader sources and general material, together with use of online search engines. Analysis also emphasised these. As covering an eight year period rather than specific events produced an unworkable level of data, selection was limited to explicit mentions of energy/energy security to make it manageable. Data selection and sources will be discussed in more detail in the research methods section. In terms of time limitations, this project had to be undertaken over three years with the empirical work undertaken largely over a twelve month period, with six months of fieldwork in the US and China, which also limited the amount of data covered. However, limiting both the cases and the time period covered allowed selection of ‘cases for theoretical and targeted purposes’ (De Vaus 2001: 239), making the research more focused. To corroborate results and ensure empirical richness (Salter 2013: 15), archival and documentary analysis was complemented by interviews with experts and officials in the US and China. In terms of

access relying primarily on grey literature<sup>5</sup> is useful as it is usually publicly available and this also avoids ethical issues (ethical issues during interviews will be discussed in the methods section). Data was organised first by state (US/China) and then by actor (state/non-state), rather than by discourse or theme, to avoid imposing particular categories and to avoid predetermining the results and selection bias. This also opened for the possibility of being surprised by my findings rather than pre-empting the results (White 2008: 6), which is also essential to interpretive research design.

Taking a pragmatic approach involved using open concepts and allowing these to adjust throughout the research process (Friedrichs and Kratochwil 2009: 717) – particularly how the terms ‘negative’ and ‘positive’ were understood in relation to energy security. This allowed the ‘conceptual framework, field of research, and empirical findings’ to adapt and adjust (Friedrichs and Kratochwil 2009: 717). Likewise, the research design evolved throughout as I discovered more detail about what kinds of records and documents were available for me to analyse (Hakim 2000: 48). This chapter also presents a reflexive discussion of ‘how the research was actually done, why, and with what effects for the resulting interpretation that is presented’ (Wilkinson 2013b: 30). Reflexive research necessitates ‘consideration of the researcher's positionality in relation to both the field and her research, in terms of the roles that she performed in her interactions with people in the field location and the influence of her positionings on the data generated’ (Wilkinson 2013b: 30). Considering the role of the researcher and analyst is essential, and requires being open and clear about the choices that were made during the research process. As noted in the normative discussion in the previous chapter, all research involves normative choices, including in choosing what to study. Here, I am studying constructions of energy

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<sup>55</sup> This term refers to ‘that which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers’ (Rothstein and Hopewell 2009: 104).

security by state and non-state actors to highlight its contested nature and therefore the potential for moving towards more positive security practices that secure beyond the state.

Lastly, a number of practical issues also affected my research design. Time limitations have already been noted. Another issue was language, in terms of analysing Chinese documents. While I speak and read Mandarin at an intermediate level, it is not good enough to conduct interviews on policy in Mandarin, so interviews were undertaken in English. The possibility of using a translator was rejected as this would be problematic in terms of carrying out discourse analysis on material which has already been interpreted through a translator, as this adds a further layer of meaning which it would be better to avoid. A lot of the documentary and archival material was available in official translations for a foreign audience, and this was used where possible, again to avoid adding another layer of interpretation in translation (for precedent, see Vuori 2008, 2011). Analysing official translations aimed at the international audience also helped to understand how China wants its constructions of energy security to be understood. However, I did translate documents where no official translation was available, which also avoided limiting analysis to documents ‘pre-approved’ (and, thus, selected for translation) by the Chinese government<sup>6</sup>. As noted, media censorship made some media sources reliable as official discourse too. Access issues will be discussed in more detail under data collection, but it is worth noting that when it comes to sensitive political issues – including anything under the heading of security – interviewee access is often difficult (Salter 2013: 22), particularly in China, so the decision to focus primarily on text analysis and archival research was made early in the research process with the aim of using interviews where possible to complement and triangulate my results.

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<sup>6</sup> The emphasis on language in discourse analysis makes knowledge of the language used and its linguistic codes and connotations essential, particularly in authoritarian states where ‘official discursive codes have been vigorously enforced’ (Hansen 2006: 83-4).

Of course, the amount of data is often endless and thus the length of research or time in the field is limited by more practical concerns, such as research funding and length of degree program (Salter 2013: 16). This research is funded by the Economic and Social Research Council, but while the original funding decision was taken based on a research proposal after this point the research and its outputs are not controlled or regulated. However, funding is limited to three years, which has affected the research period. While initially the aim was to focus on energy security in foreign policy, it is difficult to separate constructions of energy security into domestic and international as there is a lot of overlap. When constructed in security terms, it tends to have foreign policy connotations, but is also used in domestic discussions and debates to justify/enable policy. Following this, the focus was broadened to energy security more generally.

## **3.2 Research methods**

### ***3.2.1 Data collection***

Developing a clear research design helped me to prepare for my data collection by outlining more specifically what discourses I needed to analyse to achieve my objectives. However, while providing clear guidelines and a starting point, a number of choices remained and were made during the data collection process. This section first discusses choices made in terms of what sources to analyse, and how cultural differences and contexts in my two case studies affected data collection. It then outlines the process of data collection in virtual archives and interviews.

In terms of choosing sources, archival analysis was emphasised from the beginning, both for practical reasons and because of the role of discourse in this research, as outlined in the previous chapter. Presidential/ministerial speeches and documents, legislation and other written or spoken material on the subject of energy security produced by governments make up the discursive structure that outlines how the state in question represents energy security. By being widely read and having a formal authority it is these texts and utterances that discursively construct energy security. These, therefore, necessarily needed to have a central place in my analysis. Interviews were used to complement this data and to give more depth by focusing directly on the concept of energy security. This approach was also practically useful, as it was difficult to know beforehand how much access I would be able to gain to officials and experts in each state – though it was clear that it was likely to be difficult. Thinking about sources when researching China was particularly important, because of the lack of transparency in the policy process and less open access to documents.

While both collecting documents and interviewing for my study of the United States was relatively straightforward, data collection for China was more complex. The difficulties of carrying out discourse analysis in an authoritarian regime have already been noted. Less data was available overall, and it was clearly affected by censorship. However, Vouri's (2008, 2011) analysis of security discourse in China provided a very useful precedent (see also Wilkinson 2007; Holm 2004: for discussions about using securitisation and discourse analysis in non-Western cultures). Vouri raised some important questions, asking 'how does security logic work in non-democratic systems? What is 'special politics' when there is no democratic process to move security issues away from? [and] What is the political function of security in non-democratic systems?' (Vuori 2008: 66). While his focus on



securitisation is less relevant here, his discussion of security logics and actors is very useful. Vuori found that while the ‘real’ agent/s behind security constructions are difficult to identify, it is still possible to study how these constructions become legitimised by ‘analysing official programmes, laws and statements’ (Vuori 2008: 71). Likewise, security constructions still have an audience, though this may not be the general public but rather the elite: ‘who has to be convinced of the necessity of security action changes with the cultural and political...[context]’ (Vuori 2008: 72). However, the growing number of political protests and unrest in China, particularly over environmental and energy issues (Duggan 2013) indicates that the general public is an increasingly important audience at least when it comes to energy and environmental security. While ‘the Communist Party has authoritative positions from which official security issues are phrased’, with leadership statements on security being key, leaders still ‘have had the need and urge to appeal to the masses for support’ (Vuori 2008: 70-71). Overall, the use and construction of security issues ‘can be utilized for a range of political purposes, from raising an issue on the agenda of decision-making to legitimating policies, deterring threats, and controlling subordinates’; it also helps to maintain the political system (Vuori 2008: 93). The use of security for maintaining the political system and political stability is key in China, where ‘security’ has been used to mean stability, in contrast to chaos and disorder (Vuori 2008: 93).

However, while there is less openness in government, it is possible to use a broader range of speakers and documents. This includes speeches by diplomats and political actors, and some media outlets, as party line is much stricter, meaning any official statements released by government members will have been pre-approved by central government. Likewise central government and separate ministries often reproduce Xinhua (a popular news

source) and People's Daily (the Chinese Communist Party's official media outlet) articles on their official web pages<sup>7</sup>. Thus while my study on China relied on a lower number of sources, enough material was available to produce an interesting and reliable analysis. The problems of translating documents for discourse analysis have been discussed; Callahan provides one precedent with a study on Chinese national culture using discourse analysis and translating documents and imagery (2010). Vouri (2008, 2011) also provides a precedent here in using official translations where possible. It is also important to consider both text selection and interview strategies and I will now briefly discuss both of these in turn.

### ***3.2.1.1 Virtual archives***

Following Hansen's model, data collection began with some historical material, including 'conceptual histories, key texts quoted in contemporary debates and republished works' (Hansen 2006: 83). Following her criteria for selecting general material and key texts outlined in the research design, together with my knowledge of the academic literature on the subject, gave a clear idea of where to start. In the process I used a number of online search engines and virtual archives both through the respective governments and relevant ministerial departments' webpages, and media archives of key speeches, statements and events. Policy and energy consumption/production data was uncovered using a similar approach, together with the International Energy Agency (IEA) and the Energy Information Administration's (EIA) online archives and databases. Relying on a range of archives, databases and search engines to source material enabled me to cast as wide a net as possible to avoid missing important information. It is worth noting that internet censorship in China made it difficult to access a lot of sources while on fieldwork,

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<sup>7</sup> See Tong for a discussion on media censorship and self-censorship in China (2009).

consequently most of this work was done before and after the interview stage. Validity was ensured by continuing to select and analyse texts until the discursive field was saturated – that is, once the data emerging did not provide any significant new findings different from what had already been discovered.

The analysis of the United States used speeches on energy security made by Presidents' Bush and Obama in the time period under study; while energy legislation and policy documents from the time period were found via a number of different sources, including the White House page, the White House energy web page<sup>8</sup> as well as the webpages and archives of the Department of Energy and Department of State, and the Environmental Protection Administration. The Washington Post has an online archive of transcripts of key speeches by Obama with an energy section, which was also used. The analysis of China used two key white papers on energy and the five year plans produced by the Chinese government covering the period of study. In terms of online archives, it used the central government's web portal<sup>9</sup> and the archives of the Foreign Ministry, the National Development and Reform Commission, the National Energy Administration<sup>10</sup>, and the Ministry of Commerce. These also contained documents released by the State Council, which fulfils the role the cabinet plays in Western systems. The main media sources used to complement this were Xinhua and the People's Daily, as key outlets following government line. Searches were initially carried out in English to gather official translations of key documents. This was then complemented by searches in Mandarin, to avoid the possibility of a bias in selecting only documents available for a foreign audience.

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<sup>8</sup> See <http://www.whitehouse.gov/energy>

<sup>9</sup> See <http://english.gov.cn/>

<sup>10</sup> This also page has more specific information on energy policy governance in China (<http://www.nea.gov.cn/>)

### *3.2.1.2 Interviews*

Potential interviewees were contacted via email, stating clearly the purpose of the interview. The interviews themselves were undertaken in different locations to suit the interviewee – ranging from their own offices to nearby cafés and hotel lobbies in cases where this was more convenient<sup>11</sup>. A full list of interviewees is included in the appendix. They ranged from academic and policy experts on energy security to public officials from different government departments and bodies. Access to public officials was particularly difficult in China, where most of the interviewees were experts rather than officials, though some of these also worked with the government. Because of practical limitations, the interview sample was relatively small, with a total of 23 interviews undertaken. However, it became clear that further interviews would ‘yield little new knowledge’ (Kvale 2007: 44). Interviews were semi-structured with some open questions prepared beforehand but with deviations from this where relevant (see Kvale 2007: 10). Overall an exploratory approach was used, with interview directions determined by the degree and type of expertise of the interviewee (Kvale 2007: 38). This also involved a number of ‘reply questions’ to explore how interviewees’ interpreted the concept of energy security and to clarify my interpretations of what they were saying (Kvale 2007: 11). Overall, I lead the discussion towards themes I was interested in while leaving space for interviewees to express their opinions about these themes and what they saw as important within the different themes (Kvale 2007: 12). To avoid affecting the results my own opinions and the normative aims of the research were kept deliberately vague, but explained in more detail if/when interviewees requested. If this had not come up before, it was discussed after the interview itself (Kvale 2007: 26). Some interviews were recorded by hand, with notes

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<sup>11</sup> In many cases, interviewees worked in government buildings with strict access policies requiring longer-term notice and paperwork to enter. In most of these cases undertaking interviews elsewhere avoided these practical issues.

taken during and after the interview. Others, where appropriate and when consent was given, were recorded on tape and later transcribed<sup>12</sup>.

A number of practical issues were considered during the interview process. Interviewing foreign subjects requires an awareness of cultural differences (Kvale 2007: 68), which was obviously particularly important in China, but also in the United States. Consequently, much time was spent preparing for and researching the background of interviewees as well as speaking to colleagues who had conducted interviews in the United States and China to draw on their experiences<sup>13</sup>. Power asymmetry is a key concern when it comes to interviews. With elite interviews this is often reversed because of the position of the interviewee, who is likely used to the interview process and may wish to push their own agenda (Kvale 2007: 70). My own position and identity also affected the interview process from the very beginning. Both in terms of access to interviewees and during the interviews themselves as I was myself part of the process of knowledge creation – in research interviews knowledge is in a sense co-constructed ‘in the inter-action between the interviewer and interviewee’ (Kvale 2007: 1; Kvale and Brinkmann 2009: 18), which also affects the results. This made building a rapport with interviewees particularly important (Keats 2000: 23). My identity and position as a foreign academic, who is also young, white and female affected both access and the interviews themselves (see Wilkinson 2013a: 134; and Schwartz-Shea and Yanow 2012: 66-8). Interviewees may well have responded very differently to a journalist (in many cases being interviewed by an academic was considered less ‘risky’), or to someone who was an insider ethnically and culturally. In this sense, my

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<sup>12</sup> As noted by Keats, certain people and certain cultural situations make tape-recording interviews problematic, which is why this wasn’t done in many cases (Keats 2000: 24).

<sup>13</sup> One piece of advice (or warning!) from a colleague which was particularly helpful, was to be prepared for interviewees ‘testing’ my knowledge by asking me questions about the subject area to ascertain whether or not speaking to me was worth their time. Had I not been prepared for this, it could have led to interviews being cut short by inadequate responses on my behalf. With preparation, however, it helped to build rapport with my interviewees over common interests and subject-knowledge.

position was from the very beginning very much as an outsider or ‘other’. Cultural and ethnic differences were particularly evident in China, though my British accent likewise made it difficult to blend in in the United States<sup>14</sup>.

The ‘outsider’ role often also worked in my advantage, as it made it possible to ask some questions that would otherwise have been difficult as they seemed obvious to interviewees. Likewise, for some interviewees it made speaking to me both more interesting and less controversial, as I was far removed from the regular policy circuit (see Schwartz-Shea and Yanow 2012: 67). In the United States, many of my interviewees had undertaken PhD research themselves and were therefore sympathetic and interested in my research. Because the culture in China is more hierarchical, it was much more difficult not only to get interviews, but even to discover potential interviewees and their contact details – information which was widely available online for my research in the United States. This required extra preparation and reliance on contacts and snowballing, with word of mouth referral. Cross-cultural interviewing also requires some familiarity with the culture of interviewees, so the first few weeks in each country were spent on deskwork and talking to local academics to acclimatise and develop a fuller awareness of these differences (Kvale and Brinkmann 2009: 144). All interviewees were asked at the end of their interview to recommend other potential interviewees; this was both useful in providing contacts and to provide access. Transcribing the interviews while on fieldwork also helped to refine my interview technique, as I could observe in a much more detached environment how the ‘conversation’ aspect was going and see what I was doing well and not so well as an interviewer (for a good discussion on this, see Kvale and Brinkmann 2009: 180). This was incredibly helpful, as it is difficult to be reflexive during an interview as a new researcher

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<sup>14</sup> In China, while no one stated it explicitly, it became clear that talking to a foreigner about sensitive political issues was particularly controversial. However, the people I did speak to made it clear that Chinese researchers would experience similar access problems, if for different reasons.

with little experience. Using interviews and documents together was particularly beneficial as it corroborated my analysis (Moran-Ellis et al. 2006: 47) as well as giving me a richer and more up-to-date data set, as interview data was collected immediately and unlike much policy material does not go through a process of reviews before being published.

In terms of interview ethics, my research plans, including my research questions and research strategies, had to be pre-approved by the University of Birmingham research ethics committee before I left for my fieldwork. As I was not asking personal questions but interviewing research subjects in their professional capacity there were no ethical issues in terms of the interview questions themselves. Subjects were briefed on the purpose of the interview and project before the interview via email, but without too much detail to avoid leading subjects towards specific answers (Kvale 2007: 27). At the beginning of each interview, subjects were verbally asked for consent to be interviewed, and when appropriate for consent to record the interview. They were also informed of their right to withdraw from the study. They were informed that the interview data would be kept confidential and stored securely in password protected files together with the contact information of the interviewees (Kvale 2007: 27). They were also given the option of anonymity in all documents resulting from the research (Kvale 2007: 28) and informed that they could contact me at any point if they changed their mind regarding this. Only four interviewees wished to remain anonymous, and apart from one all consented to their name and details being listed in the appendix even in cases where they wished to remain anonymous in the text itself with no quotes attributed directly to them. However, because of the relatively small number of interviewees the decision was made to anonymise all quotes used in the text, as interviewees who wished to remain anonymous would otherwise be relatively easy to identify. An exception to this general rule has been made where

quotes are both provided by interviewees who did not wish to remain anonymous and where quotes provide useful factual background information rather than opinions on policy. Interviewees were also given the option of reviewing transcripts and, if requested, to review the interview questions beforehand. Because of lack of time interviews focused primarily on official discourse.

### ***3.2.2 Data analysis***

While using both interviews and document analysis, the overall focus was on common understandings, so the data collected from interviews was treated as instances of discourse. However, because the interview data presented co-created discourse rather than official discourse with a formal authority, the official discourse was used as the base for analysis with interviews presenting supplementary data and background information (Neumann 2008: 73). The empirical chapters present a discussion of energy policy in both states; these were described following source information as detailed. Meanwhile, discursive constructions of energy security (texts and interviews) were collated in an NVivo database. NVivo is a qualitative data analysis software which is particularly useful for organising and coding large amounts of text (see Hassan 2013; Bazeley 2007). Texts were organised by state, date, and by ‘speaker’ or ‘voice’. Subsequently, relevant sections of each texts were coded manually on the basis of my research questions. During coding I used a combination of pre-decided categories based on my research questions and categories that emerged during the process as important themes relating to representations of energy security. Doing this using NVivo was particularly helpful, as it contains a number of functions for exploring the data as well as for coding it and then later for organising these codes into themes. I was able to search the whole database as well as specific texts for key



terms, and to track commonly recurring words and expressions to ensure no important themes were missed.

Once my texts were coded and these codes were organised into themes, I carried out more extensive discourse analysis on the relevant sections of texts by theme. In practical terms, discourse analysis covers a group of research methods which analyse ‘empirical raw materials and information as discursive forms’ (Howarth and Stavrakakis 2000: 4). In terms of this research, using a discourse analysis approach also means treating interview data as ‘texts’. The empirical data collected is regarded as ‘sets of signifying practices’ that make up a discourse, ‘providing the conditions which enable subjects to experience the world of objects, words and practices’ (Howarth and Stavrakakis 2000: 4). As suggested there are a number of different methods of discourse analysis, and I will be focusing here on discourse analysis as outlined by Doty (Doty 1993, 1996) and Milliken (1999). Thinking about representations of energy security in the US and China involves examining how energy security is discursively represented by actors, looking at ‘the ways in which regimes of “truth” and “knowledge” have been produced’ (Doty 1996: 2). Here, my focus was how energy security is constituted and the relationship between energy and security. To see how particular discourses enabled particular policy choices, I began by studying energy policy in the time period, before mapping what discourses made these policy choices possible (see Neumann 2008: 62).

As noted in the previous chapter, discourses are here understood following Milliken, as ‘structures of significations which construct social realities’ (1999: 229). A policy debate is bound together by a ‘smaller number of discourses’, in turn made up of individual texts which tend to present particular themes and constructions of which policy choices are

‘viable, desirable or necessary’ (Hansen, 2006: 51). Key texts work as ‘monuments’, in that they play a central place in the policy debate, have ‘broad reception’ and are often cited (Neumann 2008: 67). These played a central role in my analysis. According to Doty a discourse ‘produces interpretive possibilities by making it virtually impossible to think outside of it’, providing the ‘discursive spaces’ for making sense of the world (1993: 302). Analysis therefore contains two main parts. Firstly, examining the discursive practices in the texts which work to construct the reality, including identifying viable policy choices, and secondly, an investigation of ‘how, from this construction and positioning, various possibilities of practice emerge’ (Doty 1993: 304). In this way, the texts and statements that make up discourses work to make particular policy possible, creating ‘thinkable’ policy possibilities and excluding others by making them ‘unthinkable’. It is also important to note that interpretation is an essential part of discourse analysis, and as such I am here ‘providing an interpretation of what the discursive practices *do*, which does not necessarily coincide with individual motivations, perceptions, and intentions’ (Doty 1993: 305). There are three central concepts or categories for analysis in the approach outlined by Doty; presupposition, predication and subject positioning (Doty 1993: 306).

All statements have presuppositions in the form of ‘background knowledge that is taken to be true’ (Doty 1993: 306). Presupposition also helps discourses ‘naturalise’ understandings (Doty 1996: 10), making them appear common sense or ‘fact’. Analysing presupposition involves asking what a particular use of language *implies* ‘about the existence of subjects, objects and their relation to one another’ (Doty 1993: 306). Presupposition in statements ‘creates background knowledge and in doing so constructs a particular kind of world in

which certain things are recognised as true’ (Doty 1993: 306)<sup>15</sup>. This was particularly interesting during my analysis, as many texts and statements discussed policies that were, or needed to be, undertaken in the name of energy security, while the term energy security itself was rarely defined or discussed. Likewise, the relationship between energy and national security was rarely explicitly addressed, but often implicitly assumed to be a neutral fact. The wider discursive context is vital, as statements, to be taken seriously as meaningful and important, ‘must make sense and fit with what the general public takes as “reality”’ (Doty 1993: 303). Similarly, intertextuality means that all texts ‘are intertwined with other texts’ (Doty 1993: 308). This can be explicit (quotes, references) or implicit (secondary sources, concepts, catchphrases) (Hansen 2006: 57). Again, this makes ‘cultural competence’ and historical and contextual knowledge of the case studies essential (Neumann 2008: 63)<sup>16</sup>. By looking at some marginalised discourses on energy security I am also exploring texts which do not occupy a dominant status, including ‘social movements, illegal associations, academics, NGOs’ (Hansen 2006: 64). This is particularly important for this project as ‘keeping a space open for a possible inclusion of marginal actors and discourses becomes salient when analysing where resistance and future rearticulations might occur’, especially when the official discourse is hegemonic and does not allow for much questioning (Hansen 2006: 63).

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<sup>15</sup> For example, a statement declaring that ‘energy security equals security of supply and stability of price’ is based on a number of presuppositions. Firstly, it takes as fact that energy security as a predetermined concept exists and therefore cannot be questioned and that security of supply and price are possible and desired; meanwhile security of supply assumes supply to something (state) and so it is assumed that energy security is necessarily about the security of states. Finally, the statement also assumes that these statements are facts which the author can establish as ‘reality’ or ‘truth’.

<sup>16</sup> Consequently, Neumann suggests it is helpful to study places of some familiarity, including historical knowledge and language skills – though being too much at home risks ‘home-blindness’. This was less of a problem for me as I studied both the United States and China during my undergraduate and MA degrees, including spending time at Fudan University, Shanghai for an intensive Mandarin course. Adequate levels of cultural competence required for different studies are difficult to determine. Most importantly, the researcher must have enough knowledge to tell ‘intended readers something new’ (Neumann 2008: 64).

Predication is the practice of attaching labels to subjects (Doty 1993: 306). Within a discourse, ‘predications of a noun construct the thing(s) as a particular sort of thing, with particular features and capacities’ (Milliken 1999: 232). In this way ‘a predicate affirms a quality, attribute, or property of a person or thing’, which is important as ‘attributes attached to subjects are important for constructing identities for those subjects and for telling us what subjects can do’ (Doty 1993: 306). This is key for my analysis, as I am interested in the language used to explain, describe and justify energy security, energy security policy, and constructions of energy as security. It is worth also briefly noting the Copenhagen School’s understanding of security as a ‘speech-act’, arguing that under certain conditions<sup>17</sup> utterances of security or the designation of an issue as ‘an existential threat requiring emergency actions...and the acceptance of that designation by a significant audience’ (Buzan et al. 1998: 27) securitises those issues, enabling emergency measures. Successful securitisation follows a specific rhetorical structure, which focuses on survival, urgency and ‘priority of action’ (Buzan et al. 1998: 26), analysing these plays a central role in securitisation analyses, and they were also considered during my coding.

Together, ‘presupposition and predication, in addition to constructing subjects and objects, establish various kinds of relationships between subjects and between subjects and objects... [w]e can think of this as *subject positioning*’ (Doty 1993: 306). This affects how subjects can act, and positions them against each other through ‘assigning them various degrees of agency’ (Doty 1993: 308). Deconstruction can allow us to identify some of these relationships by ‘identifying the oppositional structuring’ in texts whereby one term, the dominant, is privileged over an-Other, the subordinate, Other, deviant term (Doty 1993: 306), these three mechanisms work together. Thus, texts were analysed with a focus

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<sup>17</sup> These conditions are: the speech-act using a particular ‘grammar of security’; the speech-act coming from an actor or actors in a ‘position of authority’ to make audience acceptance of the move more likely; and the features of the supposed ‘threat/s’ (Buzan et al. 1998: 33).

on presuppositions and predications, and how these create subject positions which together work to make particular policy choices possible while excluding other options. In this way texts, as parts of larger discourses, ‘create a “world” in the sense that a particular “reality” must be accepted in order for the statements to make sense’ (Doty 1993: 308). Particular practices are made possible because particular texts construct a reality where those practices seem ‘reasonable and probably quite unremarkable’ (Doty 1993: 308). Questioning and problematising these processes is a central goal of this analysis. A final concept that is used in this analysis is that of articulation, as developed by Weldes. This is related to predications and subject-positioning, being the way in which ‘meaning is created and temporarily fixed by establishing chains of connotations among different linguistic elements’ (Weldes 1996: 284). Through

the process of articulation, then, particular phenomena...are represented in specific ways and given particular meanings on which action is then based. With their successful repeated articulation, these linguistic elements come to seem natural, to be an accurate description of reality (Weldes 1996: 285).

Vitality, articulations have to be reproduced to stay connected (in terms of the connotations which define articulations), and as a result ‘alternative representations of objects and social relations are always possible’ (Weldes 1996: 285). This emphasis on reproduction and the possibility for change differs from securitisation theory, which presents the meaning of security as largely fixed. Of course, while all meanings are fluid, some are more fixed than others (Neumann 2008: 73), but all have to be reproduced to retain meaning. A number of choices had to be made in terms of what data to include in the empirical chapters. Themes and discourses central to answering my research questions and understanding how energy security is constituted in both states were prioritised.

### 3.3 Conclusion

This chapter has outlined a research design and methods to help me answer my research questions. This could have been done in a number of different ways, and therefore this chapter has clarified the choices and decisions I have made. Like all research designs, it has a number of limitations. It emphasises official discourse over the wider policy debate. However, there is a surprising amount of agreement in the US over the meaning of energy security, though less so over the solutions. Meanwhile, in China, the wider policy debate would have been difficult, if not impossible, to study because of the political system. Marginal political discourses have instead been used to show contestation of dominant constructions of energy security. However, the analysis of marginalised discourses presents a starting point, illustrating contestation rather than the entirety of competing discourses. Energy also had to be separated from other security, economic and foreign policy issues, of which it is of course a part. However, as the focus is on what the constructions *do* rather than the intentions behind them this was less important. Overall, this research is concerned with how official constructions of energy security both legitimise and silence through particular constructions of common sense, making policy particular policy choices in the name of energy security, while delegitimising others. This is the focus of the next two chapters.

## CHAPTER 4

**Energy security in the United States**

US energy security discourses and practices continue to largely rely on a traditional notion of security. Energy security is defined as national security, economic security, in ‘us’ vs ‘them’ terms, and with an emphasis on energy independence – ultimately ensuring the American state has reliable energy supplies at stable/affordable prices. Overall, rather than producing security, policies undertaken in the name of energy security enable a continued focus on fossil fuels, causing human and environmental insecurity for individuals both within and outside the state. The argument here is not that it is in some way wrong for a state to be concerned about its energy needs, as energy supplies are clearly necessary for the continued functioning of human society as we know it. The problem, rather, is the focus on strategic autonomy, expressed in the need for energy independence to exclusively secure the American self against external threatening others, the solution for which is presented as vastly increased domestic production of fossil fuels, further enabled by legislation and a problematic policy-making process/set up.

This chapter starts by looking briefly at energy security policy-making and the historical context of energy in the United States. It then looks in detail at energy security practices between 2004 and 2012, focusing on legislation and regulation, consumption and production, change and continuity in the policy-making process, and lastly energy foreign policy practices. The following section discusses official discursive constructions of

energy security in the time period under study, focusing on how energy security has been constructed in official speeches and documents. This section draws out four key themes in official discourses, looking at energy as a priority, national security and survival; energy as economic security and growth; energy security as ‘us’ vs ‘them’; and lastly energy independence. These are used to illustrate how particular dominant constructions of energy security enabled particular policy practices. It finishes by looking at some alternative, marginalised official constructions of energy security in the discursive space.

#### **4.1 Energy security policy-making in the United States**

Practices of energy security in the United States are heavily affected by institutional factors in the energy security policy-making process. This includes arrangements as to where energy security policy is made, and continuity or change in this, which will be discussed in more detail later in this section. The Department of Energy was created in 1977, but deals largely with research and development (see interview with Delhotal 2012) rather than with defining energy security policy goals. This has particularly been the case under Obama, who appointed Nobel-prize winning physicist Steven Chu as his first Secretary of Energy. Chu’s 2013 successor Ernest Moniz is also a physicist (DoE 2013)<sup>1</sup>. At times of concern over energy prices or supply instability, analysts and policy-makers routinely lament the lack of an energy policy in the United States. However, each administration tends to have a stance on energy security, accompanied by particular goals and emphasis. This is decided primarily in the White House, where the President together with his administration set the agenda. Likewise, the ‘grand strategy’ of energy security for the United States has always been diversifying supply, diversity of suppliers, and

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<sup>1</sup> Rather than setting policy, Moniz describes himself as tasked with ‘*implementing* critical Department of Energy missions in support of President Obama’s goals of growing the economy, enhancing security and protecting the environment’ (emphasis added, see reference above).



protection of markets (Interview 2012a), to ensure a stable economy. The focus here is on official constructions with an emphasis on presidents and administrations as playing a central role in articulating energy security and policy, it is worth noting that Congress is often more extreme in linking energy and national security, together with emphasising the need to increase domestic fossil energy production (see House Committee on Natural Resources 2013).

While legislation has to pass through Congress, who may have differing goals and agendas, smaller changes are often implemented by presidents and their administrations through different government departments and bodies, from the Department of Energy, to the Departments of State, Defense<sup>2</sup> and Transportation, as well as the Environmental Protection Agency, which works to protect human health and the environment and also has input in energy legislation and writes regulations to implement environmental laws (EPA 2012a). This includes fuel efficiency standards and greenhouse gas emissions standards under the Clean Air Act after finding in 2009 that ‘six key well-mixed greenhouse gases constitute a threat to public health and welfare’ (EPA 2012b). Lastly, emergency energy security policy and decisions are made when considered necessary by the National Security Council, usually on an ad-hoc basis (Interview 2012c).

In practical terms, energy security is not a policy in itself, but rather a label signifying a much broader policy goal encompassing a number of policy-areas, as repeatedly articulated in statements and speeches. However, for analytical purposes ‘energy security policy’ will be used here to describe policies that aim to achieve or improve energy security.

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<sup>2</sup> The Pentagon plays a particularly interesting role in testing and implementing new energy technologies.

## 4.2 Historical context

In the vast majority of the academic and policy literature on energy security in the United States, ‘the objective of energy security is to assure adequate, reliable supplies of energy at reasonable prices and in ways that do not jeopardize major national values and objectives’ (Yergin 1988: 111). This definition remains dominant and largely unquestioned. Throughout the 19<sup>th</sup> and early 20<sup>th</sup> century, the United States enjoyed abundant domestic supplies of coal, crude oil and natural gas, with coal as the leading source of energy even in the middle of the 20<sup>th</sup> century (EIA 2011). Coal was first surpassed by crude oil and then natural gas, but since the mid-1980s crude oil production has been largely declining while coal remains central (EIA 2011). Meanwhile, estimated US consumption of petroleum and other liquids continued to rise, and as US production from the 1970s until 2005 either ‘fell or remained relatively flat’, the country became more and more reliant on imports (EIA 2011). However, this was not considered a problem until the early 1970s when the US experienced the start of the oil crises (for an in-depth discussion of America’s relationship with oil, see Rutledge 2006). Contemporary US understandings of energy security relate back to the oil crises of the 1970s, particularly the 1973 oil price shock. This occurred when OPEC (the Organization of the Petroleum Exporting Countries) and others issued an oil embargo against the United States and the Netherlands for supporting Israel in the Yom Kippur war, causing massive price hikes and shortages in the United States. This was a major shock to a country which had enjoyed seemingly endless supplies of energy for over a century, and the effects of the oil crises lingered on throughout the 1970s. In 1977, President Carter made a speech outlining the need to reduce reliance on imported energy, stating that ‘if we fail to act soon, we will face an economic, social and political crisis that will threaten our free institutions’ (Carter 2013). The importance of energy security to state survival is key here. The oil crises are the defining moment in US

energy security history, and are continually referred to in academic and policy writings on the subject (Bamberger 2003). They are also the main source of the dominance of ‘secure supplies’ and ‘stable prices’ as the defining characteristic and definition of energy security.

It remains central to any discussion on energy security in the United States, even today:

We've talked about this since Richard Nixon. Remember OPEC, '73, and oil -- lines at the gas station? And every President has said this is a national security issue, this is a crisis, we've got to do something about it. But we don't do anything about it (Obama 2010g)

In practice, energy policy-making has fluctuated between more market-based approaches and more reliance on the federal government (Bamberger 2003). As discussed in the literature review, there have been two key approaches to solving energy insecurity, which both understand supply and price security as central - market-based/liberal, and strategic/realist approaches. For the strategic approach, the focus is on securing the state’s strategic autonomy, as ‘security necessitates reducing vulnerability to being subject to the power of others’ (Lee 2005: 289; see also Boekestein and Henderson 2005; Klare 2008). Thus, ‘a state is said to be insecure if it has to rely on external sources of strategic materials which contribute to its “war potential” or if the supply of the strategic materials is under threat’ (Lee 2005: 266). Following this approach, energy independence equals ultimate energy supply security for a state as they would no longer have to rely on external sources. Meanwhile, market-based approaches to energy security focus on ensuring US economic security and stability through stable international energy markets. For these authors, energy security ‘is not a zero-sum effort; if appropriate policies are instituted, the improvement of one country’s energy security need not be at the expense of other countries’ (Gault 2006: 9; also Bielecki 2002). These approaches are dominant in the academic literature, but, whether market or strategic, the mainstream energy security literature focuses on securing the state in energy terms; they only differ on whether the

state should be secured in strategic or economic terms and thus differ on policy proscriptions. In policy contexts, US official discourse and practice tends to pick and mix between market/liberal and strategic/realist energy security approaches depending on political convictions and the context, often pursuing various ‘hybrid strategies’ (Dueck 2011) that combine them in different ways.

Since the oil crises in the 1970s, energy security has remained an issue on US policy-agendas. At times of supply insecurity or price hikes it has been considered key to national security, but in times of stability it has been somewhat less prioritised. The period under study in this research begins with the second Bush administration, though key events during the first administration will also be considered where they set the course for later policy. As part of this, it is important to note that Bush first came into power during an unexpected rise in oil prices during Spring 1999 (all the more shocking as it followed historically low prices in 1998). Prices kept increasing well into 2000, and as late as 2003 ‘oil prices were reaching into the mid-\$30's, and appeared poised to possibly go higher as a result of events in Venezuela and possible disruptions in oil supply from the Middle East’ (Bamberger 2003: 1). This period of extended supply and price instability was ‘the fourth significant episode since 1973 to jog American awareness of the extent to which the U.S. economy and lifestyle depends on inexpensive and plentiful energy’ (Bamberger 2003: 1). Bush repeatedly referred to the ‘energy crisis’ in speeches and documents on energy security (see for example National Energy Policy 2001), and in response to the crisis he established a National Energy Policy Development Group under Vice President Cheney to develop a plan to deal with ‘the most serious energy shortage since the oil embargoes of the 1970s’ (National Energy Policy 2001: viii). Between World War II and 2005, there have been five major energy price-hikes in the US, starting in the 70s, with the most recent

starting January 2004, doubling oil prices in twenty months<sup>3</sup> (Jordan 2005: 3). Since 2004, oil prices have remained higher - with a spike in 2007-8, and a dip in 2009 during the height of the global financial crisis, followed by another peak in 2011 during the Libyan revolution. This marks the starting point of the empirical work in this thesis. 2004 was 'the year of the global demand shock, when world oil consumption grew in a single year by what normally would have been the growth over two and a half years', partly because of a surge in Chinese consumption (Yergin 2011b: 193). This changed thinking on energy security, and placed it at the top of the national security agenda.

There has been much debate over the role of government in energy policy-making, particularly at times of peak concern over energy security – with widespread fear and claims that the US does not have an energy policy. This section relies heavily on Robert Bamberger's Congressional report, which states that 'not only does the nation have an energy policy, it has adopted several distinct policy approaches over the years' (Bamberger 2003: 1). The key energy policy variation since the 1970s has been between market-based approaches and periods of more reliance on federal government (Bamberger 2003: 2). Until the mid-1970s there were price-controls to fix the price of domestic production below market levels, which stabilised prices somewhat but discouraged domestic production, leading to increased imports (Bamberger 2003: 2). Gradual deregulation of oil prices from 1975 made prices more responsive to market changes, which in turn hoped to encourage domestic production (Bamberger 2003: 2). As Reagan took office in 1981, government control of prices was greatly reduced and energy policy more broadly became more market orientated (Bamberger 2003: 2). After Iraq's invasion of Kuwait in 1990-1991 oil prices spiked again, until the US and allies began air strikes

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<sup>3</sup> These kinds of price hikes are difficult to deal with in policy-terms, as 'every episode of instability has had its own set of contributing factors – and these may be geopolitical, based in energy infrastructure, or triggered by extremes of heat or cold beyond anyone's control' (Bamberger 2003: 12)

against Iraq in early 1991 (Bamberger 2003: 3). During the 1980s and 90s the emphasis was largely on market-based approaches, but even during these periods policy-makers increasingly viewed energy as a national security issue justifying intervention by federal government. Reliance on energy imports largely became issue in the 1970s, and George W. Bush's first term aimed to deal with this through increased domestic production via tax breaks for oil and gas companies, together with increased investment in 'clean coal' technologies and nuclear technology. Overall, 'the energy debate has been the most vigorous over the balance to be struck between increasing supply and encouraging conservation' (Bamberger 2003: 4), and this debate remains unresolved today. During the oil price fluctuations in the 1970s and 80s, a focus on conservation, efficiency and development of alternative sources of energy emerged, spurring spending on alternative sources and efficiency technology, together with government regulations to improve efficiency in appliances and buildings; however, 'largely because of the generally lower prices over time for fossil fuels...these energy programs have shown mixed results' (Bamberger 2003: 3). This remains the case today, though Obama's efforts on efficiency and clean energy have been somewhat more successful than past attempts.

There are a number of approaches to dealing with energy security understood as supply and price stability, which can be largely split into supply/demand based approaches. Supply-focused approaches aim to increase energy supplies to stabilise both prices and supply – this has involved increased fossil fuel production as well as focus on renewables (particularly biofuels like ethanol under Bush). Demand-side measures aim to reduce or manage demand for energy, through efficiency and conservation improvements. A number of measures can and have been undertaken on both supply and demand sides by both Bush and Obama, including removing regulations to allow increased coal production,

opening up of new areas for drilling and exploration for oil and gas, continued subsidies to increase domestic energy production and improvement on efficiency regulations. All of these approaches aim to secure stable energy supplies at reasonable prices for the United States.

### **4.3 US energy security policy 2004-2012<sup>4</sup>**

This section will start by looking at energy legislation and regulation made in the name of energy security. It then considers sources of energy, focusing on consumption and production and change and continuity under Bush and Obama. After this, it discusses continuity and change in the policy-making process, before briefly considering the role of energy in foreign policy.

#### ***4.3.1 Legislation and regulation***

A key part of practicing energy security is producing legislation and regulations on energy. Legislation on energy can be driven either by the administration in power or by groups in Congress. Energy legislation and regulations are heavily related to energy consumption and energy choices, promoting and enabling particular energy sources over others. While the energy industry in the United States is market-based rather than state-run, legislation and regulations allow the state to direct national energy consumption and/or production in line with its energy security priorities.

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<sup>4</sup> As discussed in the previous chapter, my understanding of the relationship between discourse and policy draws on Hansen (2006). Viewing these as ‘mutually constitutive and discursively linked’ (2006: 28), they are nevertheless separated in this chapter for practical reasons, starting by looking at the policy practices before looking at how these were enabled through particular discourses.

As noted, Bush first came into power during an energy ‘crisis’, and his administration faced another price hike in 2004. While he took a largely market-based approach, legislation was used to provide tax cuts for domestic energy production to increase supplies and reduce demand. In August 2005, Bush signed into law the Energy Policy Act of 2005 which had passed both the House and Senate with overwhelming support. The text defined it as an act ‘to ensure jobs for our future with secure, affordable, and reliable energy’ (Energy Policy Act 2005: section 1). The Act provided tax incentives, subsidies and loan guarantees for various types of domestic energy production, including oil, gas, coal, nuclear and renewables. It also aimed at energy self-sufficiency (independence) within North America, these provisions were headed under a subtitle shortened to the ‘SAFE Act’, or ‘Set America Free Act of 2005’ (Energy Policy Act 2005: title 14, subtitle B). The Act also reduced taxes on fossil fuels and nuclear energy, increased coal production and provided more investment into clean coal (Energy Policy Act 2005). Meanwhile, it exempted the oil and gas industries’ use of fluids in fracking from clean air and water legislation (Energy Policy Act 2005). Washington Post called it a ‘piñata of perks for energy industries’ (Grunwald and Eilperin 2005). It made no serious efforts to tackle consumption levels or greenhouse gases.

In his 2006 State of the Union Bush launched his ‘advanced energy initiative’, increasing funding for clean energy research at the Department of Energy (White House National Economic Council 2006). In 2007, the Energy Independence and Security Act was introduced by Democrats in Congress. It focused on achieving energy independence and security through efficiency savings, mandating use of biofuels and fuel economy (Energy Independence and Security Act 2007). The act originally aimed to also cut petroleum subsidies, but this did not pass in the Senate. Moreover, the environmental benefits of



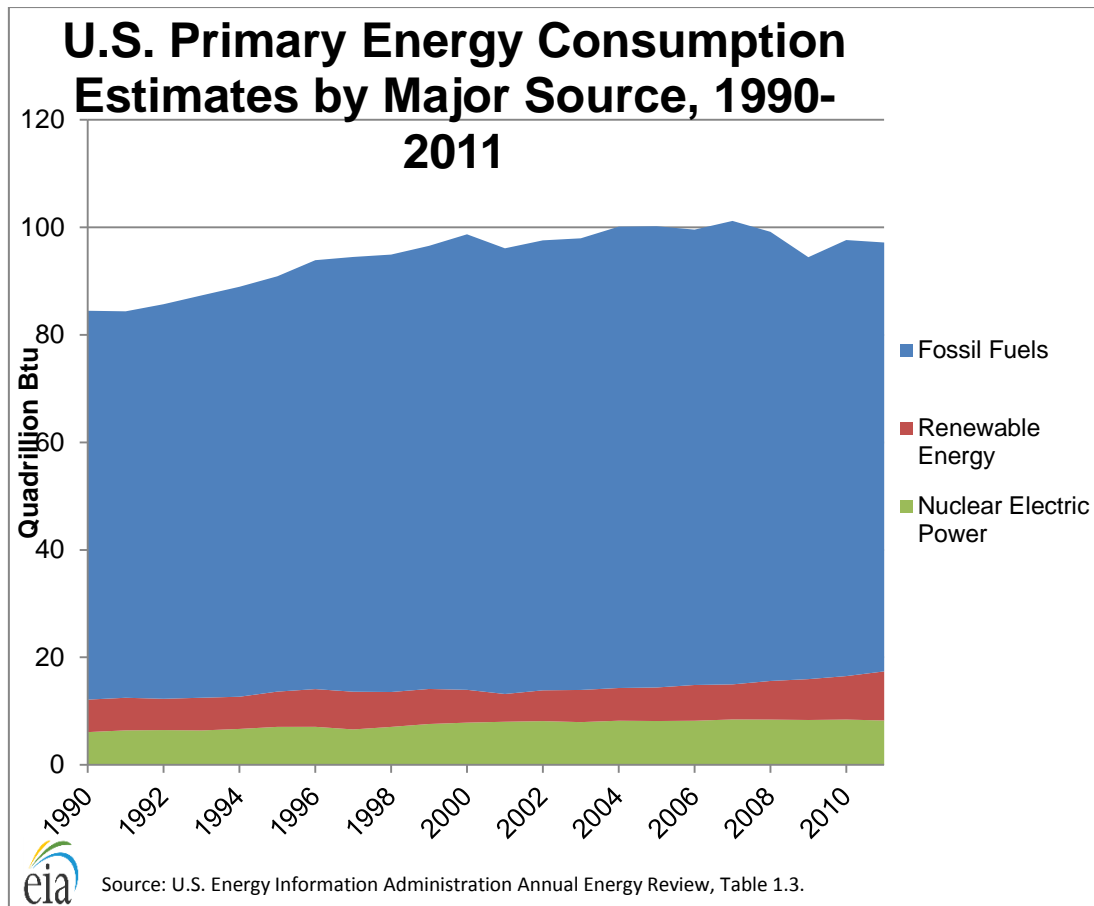
corn-based ethanol, in practice the key biofuel focused on in the Act, have been increasingly questioned (Gies 2010). However, overall Bush's two terms saw a focus on 'American-made' energy, with increased domestic production of 'traditional' fuels, particularly oil and gas, but also continued investment in coal and nuclear power (White House 2008). The administration also aimed to improve efficiency and use of alternative fuels, though the targets and achievements in these areas were much less ambitious.

Obama has taken more of a regulatory approach compared with the Bush administration's market-focus. As part of this he has increased incentives to encourage domestic production of oil and gas, as well as stronger fuel-economy and a number of programs to increase efficiency in buildings, transportation and elsewhere (White House 2012). Incentives and investments also doubled use of renewables from 2008-2012 (White House 2012). These investments and incentives were partly introduced through the American Recovery and Reinvestment Act of 2009, which enabled a huge increase in investment in clean energy and federal subsidies for clean energy firms and technology and green jobs. While Obama attempted to put in place cap and trade legislation to cap carbon emissions this failed to pass through the Senate in 2010, so the administration has instead relied on the Environmental Protection Agency to regulate greenhouse gas emissions. Likewise, Obama attempted to cut fossil fuel subsidies in early 2012, but this also failed to pass Congress. The Obama administration has continued the Bush administration's focus on reducing dependence on foreign oil so it has in some ways pursued a similar approach with increased domestic fossil fuel production, though with stronger emphasis on clean energy and efficiency. Overall, the focus on energy independence has enabled legislation to increase domestic production of energy, with a heavy emphasis on fossil fuels.

### ***4.3.2 Consumption and Production***

Practicing energy security also involves sources of energy consumption and production, and choices made in terms of which fuels to promote via subsidies, regulation, federal grants and other measures. Political administrations tend to have clear priorities in what sources of energy they see as key to US energy security.

The focus under both Bush and Obama has been on energy security as security of supplies at stable prices, including diversifying both energy sources and suppliers, and also increasing domestic production of all energy types to reduce dependence on external sources. This section looks at change and continuity in consumption and production patterns in the United States, using data and charts from the Energy Information Administration (see EIA 2012a). In terms of consumption, Obama places more emphasis on clean energy and energy efficiency than Bush. However, in practice changes in consumption have been minimal, as can be seen in Figure 4.1, showing US primary energy consumption by source from 1990-2011, divided into fossil fuels, renewables and nuclear electric power.



(Figure 4.1: EIA 2012a)<sup>5</sup>

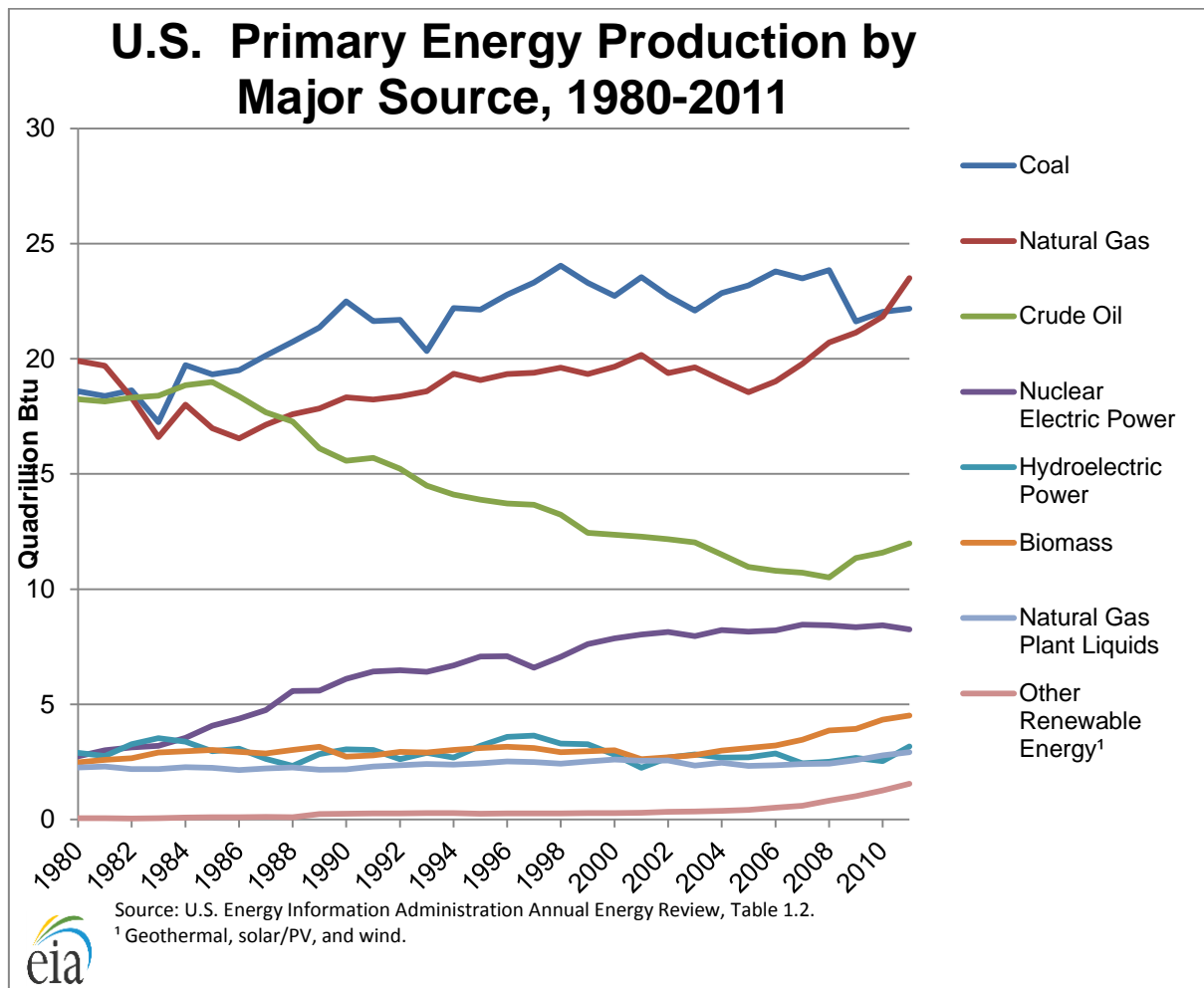
This shows that despite Obama's best efforts to promote renewables as a key part of energy security, fossil fuel use remains near 2001 levels<sup>6</sup>, though there was a dip in fossil fuel and total energy consumption at the height of the financial recession, as can be seen on the chart. Likewise, it should be noted that fossil fuel consumption did increase during the Bush administration, though by 2008 consumption had reduced almost back to 2001 levels (again, partly due to the financial recession). Furthermore, a study by the Environmental Law Institute into energy subsidies in the period 2002-2008 found that 'the vast majority of federal subsidies for fossil fuels and renewable energy supported energy

<sup>5</sup> Most recent available data from EIA. It notes that 'most energy consumed in the United States comes from fossil fuels, with petroleum accounting for 36 percent of primary energy consumption in 2011, natural gas for 26 percent, and coal for 20 percent. Nuclear electric power accounted for 8 percent and renewable energy accounted for 9 percent' (EIA 2012a).

<sup>6</sup> It is worth noting that it may take longer to see the full impact of Obama's clean energy agenda.

sources that emit high levels of greenhouse gases when used as fuel'. In the period studied, the federal government 'provided substantially larger subsidies to fossil fuels than to renewables', with fossil fuel subsidies totalling £72 billion over the study period, and renewables only £29 billion, more than half of which was towards corn-based ethanol which may decrease US dependence on oil imports but 'raises considerable questions about effects on climate' (Environmental Law Institute 2009a). Meanwhile, 'the largest subsidies to fossil fuels were written into the US Tax Code as permanent provisions', while most subsidies for renewables had expiration dates which make them less useful for the renewables industry (Environmental Law Institute 2009a). Overall, 'energy subsidies highly favoured energy sources that emit high levels of greenhouse gases over sources that would decrease our climate footprint' (Environmental Law Institute 2009b). The impact of the recession on energy consumption makes it difficult to judge how far Obama's measures to promote renewables and efficiency have translated into a more lasting reduction in fossil fuel consumption - while it is clear that renewable energy use has increased, in terms of overall use fossil fuels remain central to US energy security, showing continued conflict between the goals of energy security and climate security.

In terms of production, both Bush and Obama have promoted increased domestic production of fossil fuels through a range of measures, including continued subsidies. Historically, most of the domestically produced energy in the United States has come from fossil fuels, in the form of coal, natural gas and crude oil (EIA 2012a). At first the leading energy source, coal was surpassed by crude oil and then natural gas in the mid-20th century, but became the leading energy source produced again by the mid-1980s, and crude oil production declined (EIA 2011). In 2010, 'natural gas production exceeded coal production for the first time since 1981' (EIA 2011), see Figure 4.2 below.



(Figure 4.2: EIA 2012a)

Bush's National Energy Plan (NEP) focused on increasing supply in the face of an energy 'crisis', consisting of shortages (National Energy Policy 2001). To increase supply, there was a removal of regulations to allow increased exploration and drilling, expanding coal use and allowing increased pollution (NRDC 2001). Efficiency standards were weakened, and there were no improvements on pollution standards and several attempts to weaken existing clean air legislation to allow more coal plants to be built (Barringer 2008). Increased domestic production of fossil fuels was emphasised throughout his terms, and in 2007 he signed the Gulf of Mexico Act, which aimed to 'increase domestic oil and gas production by allowing access to key portions of America's outer continental shelf',

allowing access to new areas of potential resources of both oil and gas (Bush 2007a). In the forming of the NEP, ‘Bush administration officials sought extensive advice from utility companies and the oil, gas, coal and nuclear energy industries, and incorporated their recommendations, often word for word, into the energy plan’ (NRDC 2002). Vice President Cheney went as far as outlining the administration’s stance on energy/climate by arguing that the administration viewed conservation as a ‘sign of personal virtue’, but ‘not a sufficient basis for a sound, comprehensive energy policy’ (Cheney, in NRDC 2001).

Under Obama, the focus on increased domestic production of energy continued, though including more focus on renewables and clean energy alongside fossil fuels, the effect of which can be seen near the bottom of Figure 4.2, illustrating an increase in production of ‘other renewable energy’ sources (geothermal, solar and wind power). While spending the first few years of his administration promoting clean energy in most speeches, in 2012 Obama announced that his strategy to energy security was to take an ‘all-out, all of the above’ approach to energy (Obama 2012a). This had involved a massive expansion of oil and gas exploration, drilling, and pipelines, and was undertaken in the name of energy independence:

Last year, American oil production reached its highest level since 2003. Let me repeat that: Our oil production reached its highest level in seven years. Oil production from federal waters in the Gulf of Mexico reached an all-time high. For the first time in more than a decade, imports accounted for less than half of what we consumed (Obama 2011b)

There was a refocus on oil and gas as central to US energy security, and an emphasis on the ‘need to make continued investments in clean coal’<sup>7</sup> (Obama 2010b); the effects of these measures can also be seen on the second graph, showing increased production of

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<sup>7</sup> While ‘clean coal’ sounds good in theory, in practice measures largely enable continued investment in the most polluting source of energy available, as carbon capture and storage (CCS, or ‘clean coal’) technologies are still underdeveloped. In practice ‘substantial economic and technological hurdles remain’ in developing functional ‘clean coal’ technology (EIA 2012b).

coal, natural gas and crude oil. Increases in conventional and unconventional oil and gas production under Obama are particularly striking, and ‘U.S. crude oil output has risen by 18% since 2008’ (Yergin 2011a). Obama and Energy Secretary Chu’s approach put ‘everything on the table’, which enabled a refocus on fossil fuels and represented a change from previous Democratic administrations which tended to focus more on renewables and efficiency (Interview with Delhotal 2012). Likewise, for a Democratic administration they made a much more unequivocal commitment to nuclear energy (Interview 2012a).

#### ***4.3.3 The policy-making process: change and continuity***

Under Bush, the National Energy Policy was made through consulting industry, particularly fossil fuel corporations, via the National Energy Policy Development Group which was set up aside from other institutions, headed by vice President Cheney and senior Cabinet members, who were tasked with developing an energy policy to enhance national energy security (National Energy Policy 2001). Under Obama, energy security policy-making changed somewhat, with increasing priorities on climate change. He has used the EPA to write regulation using existing laws to improve the environment without involving Congress who are broadly resistant to climate legislation. When taking office in 2009, he created a White House Office on Energy and Climate Change, though funding for this was cut in 2011. He also created a Bureau of Energy Resources in the State Department in 2011 to integrate energy security more comprehensively into US foreign policy. US energy policy-making is a complicated process taking place in a wide variety of institutional locations. It is important to note here a continuing division of labour between staff working on climate and staff working on energy. This is the case both within departments and to an extent between departments and institutions (Interview 2012a). This tension left ‘some significant hard policy choices where those two [energy and climate priorities] were in

tension' (Interview 2012a). Even during the brief existence of the White House Office on Energy and Climate Change, it 'primarily did climate change, they didn't do international energy or energy security at all' (Interview 2012a). Meanwhile, the Environmental Protection Agency is an entirely separate entity dealing with climate regulation as best it can within institutional limitations, rather than an integral part of the energy security policy making process. It is also worth noting that there is more action on climate change and renewables on the state level.

#### ***4.3.4 Energy security and foreign policy***

While both Bush and Obama have focused on the problems and 'threat' of dependence on foreign oil, they also prioritised energy as a key part of foreign policy. For Bush, 'energy security must be a priority of U.S. trade and foreign policy', and while reliance on external supplies is bad it is the reality; as a result there is a need to 'look beyond our borders and restore America's credibility with overseas suppliers' and to 'build strong relationships with energy-producing nations in our own hemisphere, improving the outlook for trade, investment, and reliable supplies' (National Energy Policy 2001). Likewise, Obama has encouraged shale gas development and global oil production to increase 'reliable supplies' as part of foreign policy, also a focus on 'building strategic relationships with oil producers' (White House 2011). He also created the Bureau of Energy Resources in the State Department to 'ensure that all our diplomatic relationships advance our interests in having access to secure, reliable, and ever-cleaner sources of energy' (State Department 2012). The creation of Bureau illustrates the growing importance and role of energy in US foreign policy.



#### 4.4 Energy security in official discourse 2004-2012

US understandings of energy security remain shaped by the oil crises in the 1970s, which has led to a continuing focus on security of supplies at stable prices as underpinning energy security. US energy security policy rarely explicitly defines energy security. Neither the key energy policy acts nor key officials define the terms clearly. Imprecise terminology around energy security is a problem, and it is often exploited by political actors to promote particular policy options (Littlefield 2013). However, the way in which energy security is addressed in official discourse – whether this be policy documents, legislation, official speeches or statements by ministries or the President – suggests understandings of energy security in the US still relate back to these two key components – ‘assured access to energy, at an affordable price’ (Interview 2012b)<sup>8</sup>. These two components relate to national and economic security, as states need reliable access to energy supplies at reasonable prices for economic growth and stability, and when this fails it becomes an issue of national security. One interviewee argued that the meaning of energy security varies in different countries – in the US the economic impacts of high levels of volatility in oil prices is ‘what has potential to make us insecure’ (Interview 2012a). However, whatever the country, the common thread is that energy security is ‘the ability of a country to access the energy it needs to maintain national power’ (Interview 2012a). This clearly illustrates the connection between economic and national security in how energy security is understood. In national security terms, energy security remains underanalysed conceptually by practitioners, in practice leading to a more ‘ad-hoc’ response, at least when there is a direct possibility of energy insecurity; however, the priorities and issues addressed under the heading of energy security still hints at an adherence to security of supplies at reasonable prices, with price instability or supply

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<sup>8</sup> This overwhelmingly came out in interviews with policy-makers undertaken for this research.

disruptions considered as key threats to national security (Interview 2012c)<sup>9</sup>. Because of the continued link between energy and national security/power, it continues to take precedence over environmental or human security.

In terms of their approach to energy, the differences between Bush and Obama are not as large as perceived (Interview 2012a). Bush took more of a market-driven approach, but in terms of their approach to oil and gas markets the Obama administration has actually been quite similar in its protection of markets and promotion of diversity of supply, but with an added focus on regulation, particularly in terms of efficiency standards (Interview 2012a). So there are some differences, but as a practical matter both administrations opened certain lands for offshore development [of oil and gas], and both of them sustained a relatively low tax-climate which supports investment in renewables (Interview 2012a). Likewise, both of them promoted domestic supply, as did the Clinton administration (Interview 2012a). Consequently, the rest of this section presents four key themes in US constructions of energy security, most of which the Bush and Obama administrations share, though the emphasis differs somewhat in a few areas. Overall there are enough similarities<sup>10</sup> to both suggest an institutionalised understanding of energy security and therefore to justify a thematic approach for the purposes of this discussion. The themes discussed here continue through both Bush and Obama's administrations, and contain a number of subthemes and nuances. Differences in emphasis, change and continuity between administrations are noted where present.

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<sup>9</sup> For this reason, the United States also maintains a large Strategic Petroleum Reserve (SPR) to supplement supplies when disruptions occur.

<sup>10</sup> This was also the general consensus in interviews undertaken.

#### *4.4.1 Energy as a priority, national security and survival*

Energy security is continually defined as an important issue in both US domestic and foreign policies. Speeches and documents on energy security continually emphasise survival and urgency, and national security is continually linked with energy supply and price security (see Obama 2011b). When George W. Bush took office in 2001, energy was established as a priority from the start – America was going through what he called an energy ‘crisis’ (National Energy Policy 2001), consisting of shortages (particularly in California) and so he established a National Energy Policy Taskforce led by Vice President Cheney, showing energy was considered a key priority. In the report itself, the key focus was ‘to diversify and increase the supply of energy’, and oil and gas were central to this (Bush 2001b)<sup>11</sup>. There was said to be a serious energy supply crisis which would affect America over the coming decades, and failure to deal with it would ‘threaten our nation’s economic prosperity, compromise our national security, and literally alter the way we live our lives’ (Secretary of Energy Spencer Abraham in March 2001, DoE 2001). At a meeting before the release of the report, Bush stated that ‘what people need to hear, loud and clear, is that we’re running out of energy in America. And it is so important for this nation to improve its infrastructure so we can not only deliver supplies, but we need to go find new supply’ (Bush 2001a). Meanwhile, the importance of energy makes reliance on other states a vulnerability, which is also an urgent security issue: ‘our dependence [on foreign oil and gas] is growing...I believe that creates a national security issue and an economic security issue for the United States’ (Bush 2005a). This discourse continued throughout both Bush administrations, though the initial focus on energy decreased somewhat after 9/11. Throughout, Bush emphasised increasing domestic supplies of

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<sup>11</sup> It later emerged that oil, gas, coal and nuclear industries had key input into the National Energy Policy Plan produced, with their suggestion sometimes incorporated verbatim (see NRDC, 2002).

energy rather than reducing demand, enabling investment in infrastructure to allow more domestic production (National Energy Policy 2001: xi).

Likewise, Obama has continually stated that ‘American energy security’ is ‘an issue that has been a priority for my administration since the day I took office’ (Obama 2010b). The importance and urgency of energy security is clearly emphasised in statements like:

These are extraordinary times, and it calls for swift and extraordinary action. At a time of such great challenge for America, no single issue is as fundamental to our future as energy (Obama 2009a)

He has also referred to the possibility of a future ‘crisis in terms of oil supplies’ and the possible effect on the economy and national security (Obama 2010f), referencing Nixon’s desire for energy independence and following it with ‘every President has said this is a national security issue, this is a crisis, we’ve got to do something about it’ (Obama 2010g). So energy is represented as important, it is a crisis, because both national security and the economy depend on energy security. The ‘threat’ usually referenced is ‘dependence’, or supply insecurity (see Obama 2011b), and it is the American state which is under threat, even when the focus is stabilising global oil markets. The focus on energy as an urgent, important, ‘national security’ issue enables a separation between energy and environmental concerns, particularly under the Bush administration, allowing continued focus on traditional fuels in the name of economic and national security, as well as a focus on domestic production as the resources are too important to rely on other states which may be ‘unstable’ or even ‘hostile’.

#### ***4.4.2 Energy security as central to economic security and growth***

Another key feature of US energy security discourses is an emphasis on energy as essential for economic security and growth. This relates both to stable prices, which are needed to

keep the economy stable, and to continued supplies, which are also needed for growth. Under Bush, this involved a focus on increased drilling and calls for ‘new drilling options’, said to be necessary ‘to accomplish our economic goals’ (Bush 2008b). Likewise ‘keeping our economy growing requires an affordable, reliable, and secure supply of energy’ (White House 2005). He repeatedly called for expansion of ‘domestic oil and natural gas production’ including increased access for offshore drilling to increase oil supplies in order ‘to reduce pressure on prices’ (Bush 2008a). The focus on domestic sources and production is key here, as supply security, and thus economic stability, cannot be left to untrustworthy foreign states: ‘for the sake of our economic and national security, we must reduce our dependence on foreign sources of energy’ (Bush in White House National Economic Council 2006). Under Obama, this focus on energy as ‘absolutely critical to our economic future’ (Obama 2009b) continued, though clean energy also becomes considered key for growth, which will be discussed in more detail later. The focus on ‘domestic’ sources of energy continues, and is a key part of the energy strategy Obama announced in 2011, titled ‘a blueprint for a secure energy future’. This pointed to a need to

develop and secure America’s energy supplies: we need to deploy American assets, innovation, and technology so that we can safely and responsibly develop more energy here at home and be a leader in the global energy economy (White House 2011).

However, while there was increased focus on clean energy under Obama, ‘America’s oil and natural gas supplies’ were still considered ‘critical components’ necessary to enhance ‘our energy security and fuel[sic] our Nation’s economy’ (White House 2011). Likewise, increased domestic production of fossil fuels is necessary ‘given our energy needs, in order to sustain economic growth, produce jobs, and keep our businesses competitive’ (Obama 2010b). This is continually emphasised – while clean energy is represented as good, as long as it’s domestically produced, increased domestic production of fossil fuels is

necessary so economic growth does not have to be ‘sacrificed’ along the way (Obama 2010c). Meanwhile, when discussing clean energy, it is presented largely as a means for economic growth and jobs creation. Throughout the idea of domestic/foreign sources of energy is emphasised, the former identified as good, while the latter is identified as bad and leaving America ‘vulnerable’ – in the past ‘the economy was weakened by ever-growing dependence on foreign oil’ (Obama 2009j). America’s position as ‘the world’s leading importer of oil’ is equated with ‘sending our money and our wealth away’ (Obama 2009g). Dependence on foreign oil and imports is linked to the financial recession, and the solution is ‘moving forward seriously on an energy policy that frees us from dependence on foreign oil and makes sure that our economy is not vulnerable’ (Obama 2010h). This construction of energy security and domestic energy in particular as essential for economic security and growth is linked together with the elevation of energy as one of the most important issues facing America, creating a need for action: ‘This is the time that Americans must come together on behalf of our common prosperity and security’ (Obama 2009a). Linking energy strongly with economic security and growth allows added imperative for action, prioritising it in the policy-making process and enabling legislation and regulations to increase domestic production. The link to jobs creation is particularly important here and is continually evoked, particularly by Obama during the financial recession.

#### ***4.4.3 Strategy and power politics***

Another key feature of American representations of energy security is the idea of strategy and power politics, which also relates back to national security, and distinguishing ‘America’, or ‘us’, from external ‘others’, who may be hostile and not have America’s best interests at heart. While more pronounced under Bush, this continues through to Obama’s

first years in power. It also draws on the idea of ‘dependence’ on these ‘others’ as a threat to American energy security, and therefore also to American economic and national security:

America's dependence leaves us more vulnerable to hostile regimes, and to terrorists – who could cause huge disruptions of oil shipments, raise the price of oil, and do great harm to our economy (Bush 2007a)

Likewise,

Addiction to oil is a matter of national security concerns. After all, today we get about 60 percent of our oil from foreign countries...Now, part of the problem is, is that some of the nations we rely on for oil have unstable governments, or agendas that are hostile to the United States. These countries know we need their oil, and that reduces our influence, our ability to keep the peace in some areas. And so energy supply is a matter of national security. It's also a matter of economic security (Bush 2006)

Obama focuses particularly on the need for ‘homegrown’ or ‘American-made’ energy and cutting oil imports to ‘end the tyranny of foreign oil’ (Obama 2009d); for Obama, ‘that's what's going to help us secure our energy future’ (Obama 2011e). ‘Homegrown’ sources of energy, whether fossil fuel or ‘alternative’, will ‘make us more secure and less dependent on foreign oil’ (Obama 2012b). US representations of energy security consistently set up a distinction between ‘us’, who are to be protected, and ‘them’, who may be hostile or not have US interests at heart. Overall, ‘this is an American issue, making sure that we've got energy security and energy independence’ (Obama 2011d). This also makes competition a key part of energy foreign policy, and other countries, particularly China, are considered ‘aggressive’ and so the US needs to prioritise energy even more to be able to compete (Obama 2010a). Thus under Bush, energy security was a necessary ‘priority of U.S. trade and foreign policy’ (National Energy Policy 2001), which meant strengthening relationships with key producer nations, something continued under Obama (Obama 2011b). Promoting diversity of supply globally is a key priority for ensuring US energy security – which includes ‘using diplomacy to protect global supply to ensure that there is

a good diversity of suppliers’ and ‘to reduce the ability of...producers to use oil as a weapon’ (Interview 2012a). Both presidents highlight the role and nature of America as different, emphasising America’s innovation capabilities compared with other states as central to solving the energy security challenge. America is continually referred to as a ‘leader’, and that leadership and the need for it to continue on energy is key. In terms of policy, constructions of America in opposition to ‘others’ has a clear impact on energy foreign policy, encouraging competition and impacting how the US relates to other states. Energy-producing states are considered more valuable as strategic partners, while other energy consumers, particularly China, are considered competitors, and often ‘aggressive’. It also enables continued focus on traditional fuel sources, particularly oil and gas, as these are more strategically important and central to the notion of supply security.

#### ***4.4.4 Energy independence***

A key feature of energy security under both Bush and Obama is the idea of energy independence. This links back to national security and a construction of America as ‘us’, who must be independent in energy terms to secure us from hostile ‘others’. Energy independence represents ultimate supply and price security, with full control over both. Control is a key feature of the energy independence discourse, with statements like ‘an economy built to last is also one where we control our energy needs. We don't let foreign countries control our energy supplies’ (Obama 2012c). This was also featured in Obama’s 2012 State on the Union where he spoke out in favour of ‘a future where we’re in control of our own energy, and our security and prosperity aren’t so tied to unstable parts of the world’ (Obama 2012a). Likewise, Bush argued that ‘energy independence is an important part of our nation's future’ (Bush 2007b). There’s continual contrast between ‘us’ Americans, and ‘foreign’ others, who cannot be relied on:



Here in America, we have become too dependent -- too dependent -- on the increasingly limited supply of foreign oil for our own energy needs...Our dependence on foreign oil is like a foreign tax on the American Dream (Bush 2005b)

The solution to this threat of dependence? Energy independence, through increased efficiency measures and increased exploration and drilling, as well as investment in biofuels and ‘clean coal’ (Bush 2005b). Overall, ‘our dependence on foreign oil endangers our security and our economy’ (Obama 2010d). The idea of energy independence as ultimate energy security is a key part of US representations of energy security, and has been promoted by every president since Nixon. Likewise, Mitt Romney made energy independence by 2020 a key part of his platform for the election (Youngman 2012). The threat constructed through the ideal of energy independence is dependence, particularly on ‘foreign oil’. Accepting dependence on other countries means having to ‘risk the peril’ of dependence, while aiming for energy independence ‘makes our economy stronger and our nation more secure’ (Obama 2009a). Ultimately, ‘because we know we can't power America's future on energy that's controlled by foreign dictators’ (Obama 2009c). Energy independence works to construct a zero-sum, competitive, ‘America-vs-the world’ understanding of energy security. Constructions of energy independence as ‘common sense’ have enabled legislation like the Energy Policy Act of 2005, and increased production of domestic fossil fuels, particularly oil and gas. Even by 2008, Bush still wanted increased domestic production to make energy independence possible – he pointed to increasing demand for ‘traditional fuels’ and complained about continuing ‘old and outdated restrictions on increasing our domestic supplies of oil and gasoline’ (White House 2008). Meanwhile, energy independence is unlikely to make energy prices more stable, because whether or not domestically produced or imported oil is still traded openly on the world market.

Because of the focus on energy independence and prioritising of energy as a national and economic security issue, there has been a continued focus on fossil fuels and subsidies for fossil fuels in the United States. Thus, ‘in terms of the political debate [energy security is] often referred to in a sense of producing more domestically’ (Interview 2012e). Under Bush, this involved focus on increased drilling for oil and gas as well as continued investment in coal nuclear energy and ‘clean coal’ technologies (White House National Economic Council 2006). Under Obama, it led to the development of the ‘all-out, all of the above’ approach to energy. While this was the strategy from the start, it became a key slogan in his 2012 State of the Union, when he announced that ‘this country needs an all-out, all-of-the-above strategy that develops every available source of American energy’ (Obama 2012a). In practice, this involved a refocus on traditional sources of energy, increased drilling for oil and gas, and more ‘clean’ coal and nuclear, while continuing focus on efficiency/clean energy. It has also had a problematic effect on energy foreign policy, encouraging isolationism.

#### ***4.4.5 Alternative constructions of energy security***

There are some alternative constructions of energy security present in US official discourse which are also worthy of note as they diverge from the themes presented above. Under Bush, there is some focus on human security primarily in discussions on energy prices, which are considered problematic for families who need gasoline in particular in their daily lives. This focus is more evident under Obama, however, particularly in discussions on clean energy. Like Bush, he also notes the impact of high energy prices on human security: ‘gas prices affect everybody, from farmers and truck drivers, to restaurant owners and workers, as well as consumers...Families see the pinch every time they fill up the tank’ (Obama 2011b). Green jobs are considered necessary for ‘protecting the

environment and improving public health, all the same time' (Obama 2009c). Likewise there is some mention of sustainability and the security of the planet: 'The energy we use can sustain our planet or destroy it' (Obama 2009k). Security is occasionally viewed in a more international way,

We know that, even as we seek solutions to our energy problems at home, the solution to global climate change requires American leadership abroad. That's why I've appointed a global climate envoy to help lead our re-engagement with the international community, as we find sustainable ways to transition to a global low- carbon economy (Obama 2009h)

Likewise the developed world is seen as having a responsibility, 'it's critical for us to lead by example by becoming more energy efficient, and we also have to harness technology and shared scientific breakthroughs in order to find more sustainable energy patterns' (Obama 2009f). However, even where human and environmental security are discussed they tend to come last in long lists of benefits cleaner energy or green jobs will bring, after national and economy security, and the main focus remains on securing the state in energy terms. For example,

right now, some of the most promising innovation is happening in the area of clean energy technology -- technology that is creating jobs, reducing our dependence on foreign oil, and -- something that every young person here cares about -- making sure our planet is a healthier place to live that we can pass on to future generations (Obama 2011a)

Under Obama, tension remains between energy and climate priorities. During the first two years of his first administration, there was more focus on climate change, but after the failure of the cap and trade bill, the dissolution of the Office of Energy and Climate Change at the White House, and the Libyan revolution and the spiking of oil prices that followed, causing a drop in GDP, 'the administration discovered the oil market' (Interview 2012a). But 'it's not much of an organised approach' (Interview 2012a). Another interviewee noted that in practice, climate change is off the energy security agenda. It is

assumed that ‘it will happen or get dealt with along the way to new energy technologies’<sup>12</sup>, and has become a political issue, partly because Congress is divided on the issue. Dealing with energy security, ‘you're not allowed to say climate change anymore’ (Interview 2012d). But it is not completely the case that climate change is not a priority, but rather an assumption that it will happen along the way. Even when he unveiled a new climate strategy in June 2013, the plan ‘remains fatally compromised by Obama's unflinching commitment to the maximum possible exploitation of fossil fuels’ (Ahmed 2013).

Overall energy security is constructed in a problematic way that reinforces links to national security, enabling continuing emphasis on fossil fuels. However, the presence of some alternative constructions of security including environmental and human security does begin to provide some space and potential for change. These can be used as a basis for conceptualising a more positive energy security in practice, which will be discussed further in chapter six.

## 4.5 Conclusion

US energy policy-making is a complicated process taking place in a wide variety of institutional locations. However, each administration tends to have a stance on energy security, accompanied by particular goals and emphasis. This is decided primarily in the White House, where the President together with his administration set the agenda. While energy security is rarely explicitly defined, policy choices and discourses clearly illustrate the centrality of supply and price stability. Overall, dominant themes in US energy security discourses between 2004 and 2012 all relate back to an understanding of energy security as

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<sup>12</sup> This interviewee went on to note that ‘we never talk about coal, we talk about clean coal, and that includes, you know, carbon capture, utilisation and storage, CO<sub>2</sub>. So it's in there, it's just kind of, assumes that it will happen along the way to new energy technologies’.

security of supplies at stable prices to the American state. While energy is rarely fully securitised, securitising moves are common, with clear links between energy and national security, as well as statements outlining energy as a key priority, emphasising urgency and survival, as well as the need for extraordinary action. These discourses work to enable particular policy practices, valuing the supply security of the state above environmental and human security. Ultimately, current US energy security discourses and policy practices take a narrow interpretation of security, whereby security equals reliable energy supplies at affordable prices, with no consideration of the consequences for environmental and human security.

US energy security discourses and practices continue to rely on a traditional understanding of security<sup>13</sup>. Energy security is defined as national security, economic security, us/them, independence, ultimately ensuring that the American state has reliable energy supplies at stable/affordable prices. Overall, rather than producing security, policies undertaken in the name of energy security enable a continued focus on fossil fuels, particularly on increasing domestic production of these, causing human and environmental insecurity for individuals both within and outside the state. However, the existence of some alternative notions of energy security even in official discourse does suggest there is some space for change. This is discussed further in chapter six. Interestingly, one interviewee noted that we are in a period where understandings of energy security are changing – before, the definition of energy security was a sentence: ‘now it’s a sentence with a lot of commas’ (Interview 2012e).

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<sup>13</sup> If US domestic fossil fuel production continues to increase, it is set to become a major energy exporter in the future. It will be interesting to see how much impact this will have on notions of energy security, though it has had very little impact so far.

## CHAPTER 5

**Energy security in China**

This chapter looks at how China conceptualises and practices energy security. The focus here is on official discourses, and analysis is centred on speeches by leaders, policy documents, and government-approved news sources. For a discussion on the wider debate on energy security within China, see Kennedy (2010) who illustrates the multitude of voices weighing in on the energy security debate (Downs 2004: also provides a good discussion on this). Even within official discourses, like in the US, there are a number of voices, approaches and emphases on what energy security involves, and the focus here is on the dominant strands.

It is argued here that China's conceptualisation and practice of energy remains too narrowly focused on national security and economic goals; particularly continued economic growth. While there has been some change to include more focus on sustainability, security of supplies as stable prices for the Chinese state remains the key focus. In terms of the bigger picture, China's understanding of energy security is similar to the US: identifying dependence on foreign states for supplies as bad and therefore continuing focus on increased domestic production of fossil fuels to achieve continued self-sufficiency in energy. However, when it comes to details and emphasis in key themes

they do differ somewhat, as can be seen throughout this chapter<sup>1</sup>. The chapter starts with a brief look at the energy policy-making process and the historical context of energy in China. It then turns to look at Chinese energy security policy practices in the period 2004-2012, focusing on legislation and regulation, production and consumption, the policy-making process, and the role of energy security in foreign policy. After this, it presents an analysis of the relevant energy security discourses, drawing out four key themes, before looking at some alternative official energy security discourses.

## **5.1 Energy policy making in China**

Energy policy-making in China is a complex process with input from a number of agencies and government departments, as well as industry stakeholders. The top leadership set out the overall agenda and define energy security, setting targets for each five year period in terms of energy production and consumption by energy type, as well as efficiency and emissions. Politicians articulate and implement national energy policies, and in the process try to satisfy a wide range of interests (Zha 2013 forthcoming: 1). Policy debates in China differ from those in the United States, in that debates ‘are often hidden and the participants frequently do not acknowledge that differences of opinion exist’ (Downs 2004: 29). In practice, this means that rather than acknowledging differences of opinion openly, officials often ‘talk past’ each other (Downs 2004: 29) – as can be seen in the number of ‘key’ priorities identified by officials in this chapter.

Problematically, China has not had an energy ministry since 1993, the same year as it turned from a net oil exporter to a net importer. Meanwhile, ‘debate over the necessity for

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<sup>1</sup> To avoid over-emphasising the similarities between the two the discourse analysis and coding was undertaken using a separate NVivo database to allow codes to emerge from the data, while bearing in mind key areas of interest.

having a ministerial-level bureaucracy to govern the various components of the country's energy industry has been ongoing and inconclusive...' (Zha 2013 forthcoming: 1). Energy administration, policy and planning duties are now officially in the hands of the National Development and Reform Commission (NDRC), a government department responsible for national economic and social development. Within the NDRC, the National Energy Administration (NEA) is a sub-department in charge of energy policy since 2008, when it replaced the Energy Bureau (PRC NDRC 2012). The NEA has a broad mandate, including 'managing the country's energy industries, drafting energy plans and policies, negotiating with international energy agencies, and approving foreign energy investments', but 'lacks the authority, autonomy, manpower, and tools to deal with the country's energy challenges' (Downs 2008).

On top of this, in 2010 a National Energy Commission was established, with the Prime Minister as its head 'to step up strategic policy-making and coordination'(Xinhua 2010a). The Commission is responsible for 'drafting national energy development plans, reviewing energy security and major energy issues and coordinating domestic energy development and international cooperation', according to the State Office Information Council, and it is 'composed of 21 members from various government agencies' (Xinhua 2010a). In practice, the Commission coordinates different departments work on energy, while the National Energy Administration in the NDRC carries out its daily duties (PRC NDRC 2012). So far, 'the commission has functioned on a crisis-driven basis ' (Zha 2013 forthcoming: 1).

Besides the NDRC's National Energy Administration, a number of government departments play some role in energy policy, including the Ministry of Foreign Affairs, the



Ministry of Commerce, the Ministry of Science and Technology, and the Ministry of Environmental Protection. Problematically for Chinese energy policy-making, the NDRC is a weak ministry (Downs 2008), and China has had difficulties in ‘finding an appropriate mechanism for governing its energy industry’ (Zha 2006a: 186). The lack of an energy ministry since 1993 ‘greatly reduces the value of strategic plans the central government wishes to implement’<sup>2</sup> (Zha 2006a: 186). The main energy companies also play a role in forming energy policy. These include China National Offshore Oil Corporation (CNOOC), Sinopec, and China National Petroleum Corporation (CNPC). They are partially independent and partially state-owned with some state financing. They are also ‘routinely consulted by the government on policy matters’ (Downs 2004: 25). Top staff ‘belong to the pool of high- ranking cadres’, but most of the companies are also publicly listed to various degrees, and thus also need to deliver profits to share-holders (Zha 2013 forthcoming: 7). The relationship between these companies and the state is often debated and still evolving – they do not simply follow government dictates, but work quite independently – sometimes leading and pushing policy and occasionally even flouting government advice to ‘advance corporate interests at the expense of national ones’ (Downs 2008).

In terms of actual policy energy is still a relatively recent priority, and the first white paper on energy did not appear until 2007. Lots of agencies, bodies and officials were involved in the drafting of it, including ‘a team of experts and officials from the National People’s Congress (NPC), the top legislature, and the State Council’ together with the National Energy Commission under the Prime Minister (PRC Central Government 2005a). The

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<sup>2</sup> Problems in energy policy-administration are long-standing. As noted by Zha, ‘the Ministry of Fuel Industries was abolished in 1955, when separate ministries for coal, electricity and oil were established. In 1970, a new Ministry of Fuel and Chemical Industries combined the functions of those three ministries, but it had to be dissolved five years later. In 1988, a Ministry of Energy was launched to oversee coal, oil, nuclear and hydroelectric development, but it was again dissolved in 1993’ (Zha 2006: 186).

2007 white paper pointed to the need to strengthen energy legislation ‘to provide a legal guarantee for increasing the energy supply, standardizing the energy market, optimizing the energy structure and maintaining energy security’ (PRC NDRC 2007a). Likewise marketisation of the energy industry is considered a priority, but alongside ‘national energy management’, which remains key to ensuring energy security (PRC NDRC 2007b). The same areas were noted in the 2012 white paper on energy, noting that markets ‘playing an increasingly important role in resource allocation’. It emphasised the need for continuing work on legal reform to regulate the energy market alongside marketization of the energy industry, together with the need to improve energy administration and management (PRC Central Government 2012b: section I and VIII). End-use energy prices are still regulated by the government (Zha 2013 forthcoming: 3), though the pricing system differs depending on the energy type (Li 2011: 13).

Overall, there is a lack of clear administration, though energy security and policy objectives are increasingly set out in white papers by central government and the National Energy Commission with input from the NEA as well as other government departments, bodies and institutions. There is no one meaning of energy security, rather this is made up of a number of policy priorities which will be discussed in more detail later.

## **5.2 Historical context: energy in China**

China was relatively late to industrialise, and as a result energy security only really became an area of attention in 1993, when it went from being a net oil exporter to being a net oil importer (Lee 2005: 265). While China was self-sufficient in energy from the 1950s until the early 1970s, ‘Soviet-supplied oil and technological assistance for developing the

Chinese oil industry' was essential for both achieving and maintaining self-sufficiency (Zha 2006a: 179). However,

By the mid-1970s, the economy was on the verge of collapse. China had energy self-sufficiency but not energy security. Improvements in China's international relations in the early 1970s led to an expansion of the Chinese economy. China lost self-sufficiency in energy but gained improvement in energy security (Zha 2006a: 179)

Moreover, oil and coal played 'a valuable strategic purpose for Beijing, helping renew links with the world's industrialised economies' as it exported oil in Asia (Zha 2006a: 180). With industrialisation and opening up from the late 1980s energy demand increased, and China became increasingly reliant on imports of crude and processed fuels (Zha 2006a: 180). Interestingly, 'for much of its contemporary history, China treated fossil fuels as just another set of ordinary commodities...[u]ntil the 1990s, oil, coal, minerals, grain, and other raw materials made up more than half of the total value of exports' (Zha 2013 forthcoming: 4). As a result, energy was long characterised as a 'domestic economic development issue' rather than an issue of national security, with a few exceptions including pipeline locations or border disputes where energy resources play a part (Zhang 2011).

There was another big change in 2004 when China experienced an energy demand shock which changed thinking on energy security. From focusing solely on growing oil imports in energy security discussions 10-15 years ago, there was a recognition of the need to change consumption patterns and look at other sources of energy to ensure continued economic growth, so in a sense the demand shock broadened the energy security debate in China (Interview 2012f)<sup>3</sup>. Because of this change there was a break between the 10th (2001-2005) and the 11th (2006-2010) Five Year Plans - by the 11th there was a new focus

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<sup>3</sup> There is some debate over this – others interviewed for this research suggest the Chinese leadership is still very strongly focused on security of oil supplies in energy security debates.

on changing energy consumption patterns and reducing energy intensity. The 12th Five Year Plan (2011-2015) can be seen as a continuation of this but with actual quantitative targets (Interview 2012f). China, like the US, has seen competing discourses promoting market/liberal or strategic/realist approaches to energy security with their accompanying policy suggestions (Downs 2004: 22), but in terms of policy practice China has pursued a similar approach to the US, combining the two in a hybrid strategy, sometimes referred to as ‘hedging’ (Tunsjo 2010). Overall, ‘Chinese understanding and practices of energy security are evolutionary...[t]here has not been and will likely be no straightforward path of energy policies, in either domestic or overseas realms’ (Zha 2013 forthcoming: 1). However, it is clear that energy security is increasingly important to China, and it underpins not just economic and national security, but also the political survival of the Communist Party of China (CPC) (Leung 2011). Ultimately, ‘a reliable and adequate supply of oil at reasonable prices is crucial to national values and objectives and underpins, in part, the party’s governance’ (Leung 2011: 1332).

Statistics on China’s energy consumption and production vary, and often rely on different measures. There are also often accusations of government tampering with statistics, but reliability has improved in recent years.

For a long time China has been relying largely on domestic energy resources to develop its economy. The rate of self-sufficiency has been above 90%, much higher than that in most developed countries. China became the world’s largest energy producer during the 11th Five-Year period [2005-2010] with a strong foundation for energy production and supply (Li 2011: 9).

This period saw huge increases in domestic production of coal, doubled gas production, and some increase in oil production, and a big growth in renewable energy (Li 2011: 9-12). According to one source, China’s primary energy consumption increased from 0.57 to 3.25

billion ton coal equivalents between 1978 and 2010 (Fan and Xia 2012: 23)<sup>4</sup>. China's National Bureau of Statistics put 2011 total primary energy consumption at '3.48 billion tonnes of standard coal equivalent (btsce) in 2011, a 7 percent increase from the previous year. Domestic production stood at 3.18 btsce. This means that roughly 9 percent of total energy consumption came from imports' (Zha 2013 forthcoming: 2). While coal is domestically produced, more than half of oil consumption relies on imports (IEA 2012: 4). As a result, oil is often at the centre of Chinese energy security discussions (Leung 2011: 1330). 'Energy security' has been a 'buzzword' in China since 2000, when oil imports doubled (Leung 2011: 1331).

### **5.3 Chinese energy security policy 2004-2012**

This section focuses on legislation and regulation, consumption and production, change and continuity in the policy-making process, and the role of energy in foreign policy.

#### ***5.3.1 Legislation and regulation***

This section will focus on the two white papers on energy that have been released by the central government, before briefly looking at other relevant legislation. The white papers on energy set out the broad aims and course for energy policy, including guidelines and regulations for energy industries, and tend to follow after five year plans, with the first appearing in 2007 and the second in 2012. The white papers have provided a more coordinated direction for China's energy policy, though calls for reform in the energy policy-making process continue.

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<sup>4</sup> IEA measures this using TOE (tons of oil equivalent), to a consumption increase from 420 million toe (tons of oil equivalent) in 1980 to 2,150 million toe in 2009 (IEA 2012).

Appearing in 2007, the first white paper on energy was titled ‘China’s energy conditions and policies’, and it set out the overall strategy and goals of energy development; emphasising conservation, increasing supply capacity, improving energy technologies, coordinating energy and environmental development, deepening energy system reform and strengthening international cooperation on energy (PRC NDRC 2007a). There was a focus on demand reduction and efficiency, reducing reliance on foreign oil and reducing dependence on coal. Overall, it avoided quantitative goals, focusing on more generic aims, such as, ‘by 2010 the energy supply will basically meet the demands of national economic and social development; and obvious progress will have been made in energy conservation’ (PRC NDRC 2007a: 13). The main exceptions to this are reiterations of the goals already outlined in other plans, specifying a reduction in per-unit GDP consumption of energy of 20% from 2005 to 2010, and a 10% reduction in total amount of major pollutants discharged (PRC NDRC 2007a: 13); as well as reiterating the goal of 10% increase in renewable energy consumption by 2010 and 15% by 2020 (PRC NDRC 2007a: 23).

The 2012 white paper on energy was titled ‘China’s energy policy 2012’. It contains similar key sections to the 2007 white paper, including continued focus on conservation and improving energy technology and strengthening international energy cooperation. It also has the following additions: ‘vigorously developing new and renewable energy, promoting clean development of fossil energy; improving universal energy service...[and] deepening institutional reform in the energy sector’ (PRC Central Government 2012b). Like the 2007 white paper, it also contains reiterations of goals set out in the preceding (12<sup>th</sup>) Five Year Plan (2011-2015), though this time these goals are more specific, targeting consumption patterns in terms of energy type: ‘by 2015 non-fossil energy will rise to 11.4

percent in the national total primary energy consumption, energy consumption per unit of GDP will drop by 16 percent from 2010, and CO<sub>2</sub> emission per unit of GDP will decrease by 17 percent from 2010'. Likewise, 'by 2020 non-fossil energy will account for 15 percent of its total primary energy consumption, and CO<sub>2</sub> emission per unit of GDP will be 40-45 percent lower than in 2005' (both PRC Central Government 2012b: section II). It also contains more specific goals for each energy industry. It specifically addresses the problem of energy regulation in China, mentioning ongoing work on an energy law, improvements to the 'energy-related legal regime to regulate the energy market' and the need to 'strengthen administration' (PRC Central Government 2012b: section X).

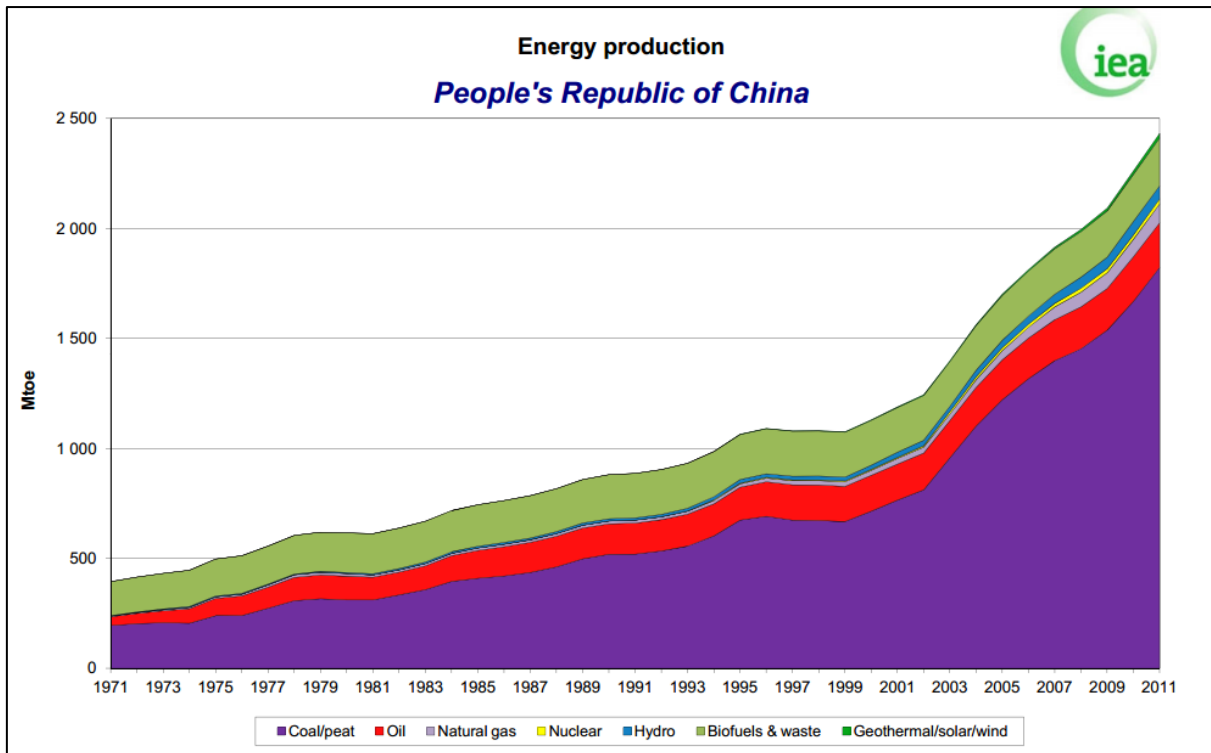
Other relevant legislation includes the Renewable Energy Law finalised in 2006, which set targets giving 'first priority to the exploitation of renewable energy and promotes the establishment and expansion of the market for renewable energy by setting objectives for the total volumes of the renewable energy to be exploited and taking appropriate measures' (PRC National People's Congress 2007). It 'comprises the legal framework for China's renewable energy policies...[covering] all relevant regulations, sectoral targets, development plans, fiscal and subsidy policies, and national standards' (Li 2011: 25). Likewise, China's Energy Conservation Law was redrafted in 2007, coming into effect 2008. This set out changes to administration of energy conservation, and stipulations by sector for improving conservation and efficiency (PRC National People's Congress 2009). It also referred to conservation of resources as 'a fundamental State policy' (article 4, PRC National People's Congress 2009). National targets feature clearly in these laws, showing a new and clear commitment to renewable energy and conservation.

### ***5.3.2 Production and consumption***

In terms of energy production, China still relies largely (around 90%) on domestically produced energy, with a heavy focus on coal (PRC NDRC 2007a: 12). Figure 5.1 below shows IEA estimates of energy production changes since 1971. Production and consumption patterns depend largely on domestic resources, with the government playing a key role in setting targets for all the relevant energy industries, as well as providing fiscal and tax incentives to keep production and consumption in line with national targets.

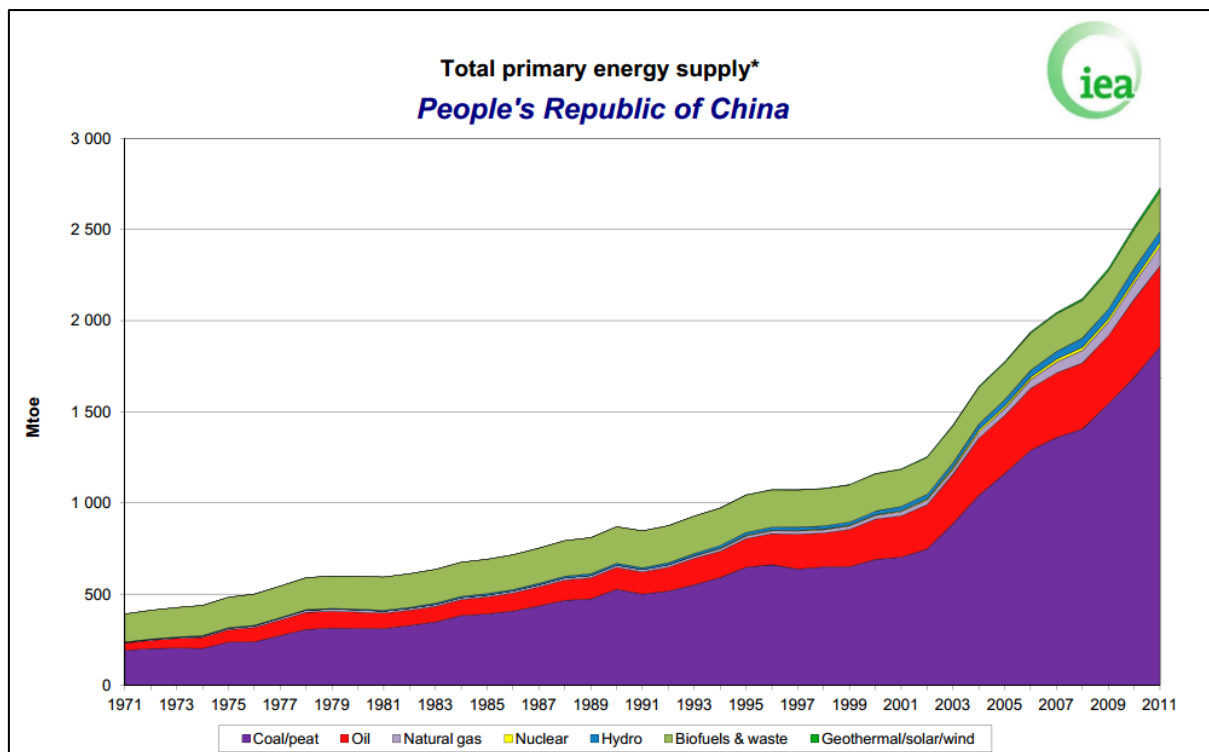
China is facing large increases in energy demand with increasing economic growth, though efforts have been made to limit consumption increases through improved efficiency and conservation. It also aims to increase domestic production to meet growing demand. Oil production has declined as a percentage of total production, with increasing reliance on imported oil (Fan and Xia 2012). China is also on schedule to meet renewable energy targets set out in the Renewable Energy Law, and aims to increase shale gas exploration and production.





(Figure 5.1: IEA 2013a)

In terms of consumption, China continues to rely heavily on coal, and its central place in China's energy mixture 'will remain unchanged for a long time to come' (PRC NDRC 2007a), though environmental considerations increasingly call this into question. In terms of the overall mixture of sources of energy supply, it has remained relatively unchanged in the period studied here, though total primary consumption has increased heavily, as discussed in the previous section – Figure 5.2 below shows International Energy Agency (IEA) estimates of China's total primary energy supply.



(Figure 5.2: IEA 2013c)<sup>5</sup>

Growing energy demand is an increasing problem for China, and there is recognition that ‘energy consumption has grown too quickly in recent years, increasing the strain on energy supply...[f]ossil energy resources have been exploited on a large scale, causing a certain amount of damage to the eco-environment’ (PRC Central Government 2012b: preface). As a result, there have been some calls for controls on energy consumption – in 2011, a senior NEA official said the government will ‘boost energy production and control consumption’, though no consumption control target was specified (Xinhua 2011a). This was reiterated at the National Party Congress in November 2012, where outgoing President Hu stated: ‘[w]e should launch a revolution in energy production and consumption, impose a ceiling on total energy consumption, save energy and reduce its consumption’ (Hu 2012). However, it is worth noting that the focus on conservation and efficiency has made some impact –

<sup>5</sup> Figures exclude electricity trade.

between 1978 and 2005 ‘China's primary energy consumption rose by 5.16 percent on average each year, while GDP grew by 9.6 percent’ (Yang 2007).

In terms of changing patterns of consumption, there are also more recent calls to increase natural gas consumption in China in order to reduce reliance on coal, from the current 4% to 8% during the 12th Five-Year Period (2011-2015), according to Wu Yin, deputy head of the NEA (Xinhua 2010b). While China remains largely self-sufficient in energy, meeting around 90% of its consumption through domestic production, imports of oil are becoming increasingly important.

### ***5.3.3 Policy-making process***

There are increasing calls for strengthening China’s energy policy-making process, including legal reform to improve regulation of the market, and energy administration and management (PRC Central Government 2012b: section I and VIII). Institutional change and continuity has been largely covered in the earlier part of this chapter, but it is worth noting that the energy planning and policy-making process is continually evolving, with increasing importance placed on energy governance. The 2012 white paper on energy in particular made this a clear priority, emphasising the need to ‘strengthen top design and overall planning’ (PRC Central Government 2012b: section VIII). This can also be seen in the 2010 creation of the National Energy Commission, headed by the Prime Minister and including key staff in the NDRC, the NEA, as well as other government departments (Xinhua 2010a). It’s members also include the minister for state security and the head of the People’s Liberation Army (Bradsher 2010). The creation of the new Commission to oversee and coordinate energy policy above ministerial-level shows just how important

energy has become. However, the NEC has so far worked largely on a crisis-driven basis (Zha 2013 forthcoming: 1).

Like in the US there is some division between staff working on energy security and staff working on environmental issues, particularly before the 11<sup>th</sup> Five Year Plan, which began in 2006 (Interview 2012e). From 2007 onwards, there was more coordination between the NDRC and the Ministry of Environmental Protection as their objectives under the Plan coincided (Interview 2012e).

#### ***5.3.4 Energy security and foreign policy***

Energy security is a major part of Chinese foreign policy, playing a key part both in China's bilateral relations with other states and in its international engagement. It is mentioned as a key issue in most international speeches by Chinese officials, ranging from diplomats and ambassadors to PM Wen Jiabao and President Hu Jintao at G8 meetings, BRICS summits, the United Nations, and so on. China also has a number of bilateral strategic partnerships where energy plays a major role, both with energy exporters and others, including the US and the EU (PRC NDRC 2006). This is discussed further in under theme number three, below – the need for a stable international environment and energy cooperation. In this sense, maintaining political stability in oil rich areas is also constructed as key for ensuring energy security (Xinhua 2006a).

#### 5.4 Energy security in official discourse 2004-2012<sup>6</sup>

Chinese official discourse contains a number of themes relevant to understanding how energy security is viewed in China. As early as 2005, the head of the Energy Bureau in the NDRC, Xu Dingming, pointed to the need for a new energy law ‘to ensure our energy security’ (PRC Central Government 2005a). He went on to suggest that the focus of the law, which is still forthcoming at the time of writing, would likely ‘include principles of energy saving, cleaner utilization and security’, all emphasised by top leadership (PRC Central Government 2005a). While China’s self-sufficiency in energy is often emphasised, the stability of international energy markets is increasingly highlighted as a central concern for Chinese energy security (PRC NDRC 2005). Following this, Chinese energy security strategy includes a combination of ‘co-ordinating domestic development and external cooperation’ (PRC NDRC 2005). In 2006, Hu Jintao summarised China’s energy strategy as follows: ‘Give high priority to conservation, rely mainly on domestic supply, develop diverse energy resources, protect the environment, step up international cooperation of mutual benefit and ensure the stable supply of economical and clean energies’ (PRC Foreign Ministry 2006). It is clear that while China is largely self-sufficient in energy, security of oil supplies and the stability of the oil market are both increasing priorities – alongside retaining self-sufficiency.

This section draws out four key themes in Chinese energy security discourses, each of which has a number of sub-themes: firstly supply security and price security; the

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<sup>6</sup> Chinese discourses also continually repeat a focus on science and technology as key to ensuring energy security. This is a common trope in Marxist discourse, however, so isn’t dealt with a separate theme here. It includes a focus on energy research and development (PRC Foreign Ministry 2006). The 2007 white paper notes China’s ‘conspicuous scientific and technological achievements relating to energy’, particularly oil, gas, and coal exploration and development, enabled by China’s ‘Scientific Outlook on Development’ (PRC NDRC 2007a: section I). It contains statements like the following: ‘science and technology is the primary productive force and the main motive force of energy development’ (PRC NDRC 2007a: section V). The 2012 white paper similarly reiterated China’s commitment to the ‘Scientific Outlook on Development as its guiding principle’ (PRC Central Government 2012b: preface).

importance of energy to national security and economic growth; the need for a stable international environment; and lastly energy self-sufficiency. After this, it briefly discusses alternative official constructions of energy security, focusing on economic and social development, world energy security, sustainability and energy and the environment. The empirical focus is primarily on China's two energy white papers, but also covers a number of official speeches on energy by key actors, including President Hu Jintao and Prime Minister Wen Jiabao.

#### *5.4.1 Supply security and price security*

Supply and price security play a key part in China's energy security discourses, particularly with increasing dependence on oil imports and international markets, so it has become more and more important over time (Interview with Gao 2012). Supply, particularly of oil, is a key concern, and largely takes priority over price stability. Ultimately, 'China has a closer relationship with the global energy market now...so in that sense it is quite similar to the US, secure supplies at stable prices are important' (Interview with Gao 2012)<sup>7</sup>.

China's energy supply story is one of increasing tension between supply and demand. The period between 2004 and 2012 has seen growing marketisation of the domestic energy industry, together with increasing interaction with the international energy market. Rapid development has led to huge growth in consumption, putting heavy pressure on supply capacity (PRC NDRC 2005) as well as increasing environmental pressure due to China's heavy reliance on coal. Reliance on domestic sources forms the core of China's energy supply strategy, and is articulated repeatedly in the vast majority of statements - this will

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<sup>7</sup> Downs (2004: 31) also makes the case that Chinese analysts and policy-makers consider oil price volatility and physical supply disruptions to be 'the main threats to energy security'.

be discussed in more detail under self-sufficiency. While the focus remains on domestic supply and China is said to be ‘striving to ensure a stable supply of energy with a steady increase in domestic energy production’ according to the 2007 white paper (PRC NDRC 2007a: 11), increasing imports has led to growing attention on global energy supply markets. One of the earlier reports on energy security, produced by Vice Premier Zeng in 2005<sup>8</sup>, summarised China’s energy issues accordingly: ‘the demand for energy has outstripped supply...[and] changes in the international energy market are having more impact on China's domestic energy market’ (PRC Central Government 2005b). Clearly, supply security is becoming increasingly important. Zeng suggested that ‘domestic energy supply should be improved to ensure energy security’ (PRC Central Government 2005b). He also pointed to continued development of the coal industry in China as necessary to ensure security of supplies, as China’s domestic oil and gas resources are relatively poor, and increasing reliance on oil imports means energy supply is affected by changes in international oil supply (NDRC 2005). Thus, because coal is domestically available, China should take full advantage of domestic coal resources to reduce dependence on foreign oil imports (NDRC 2005). Because of increasing reliance on imported oil and concerns over energy supplies, China also began building up strategic oil reserves in 2004, in case of emergency supply disruptions (Yang 2008). This dual attention to domestic and international supply security is evident throughout the period under study, despite China’s high rate of energy self-sufficiency.

The 2007 white paper on energy likewise presented improving and increasing supply capacity as a central goal of energy policy, in the process of which China will continue to ‘rely mainly on domestic energy resources’ (PRC NDRC 2007a: 20). To achieve increased

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<sup>8</sup> Zeng Peiyan was Vice Premier of the State Council 2003-2008.

supply the white paper proposes increasing coal supply while reducing pollution (2007a: 21), ‘expediting development of oil and gas’ (2007a: 22), and ‘vigorously developing renewable energy’, said to be a ‘strategic choice’ to reduce tension between supply and demand and to achieved sustainable development (2007a: 23). Meanwhile, diversification remains a key part of supply security, both in terms of different types of domestic sources and in the case of imports, both to different types of energy sources and in terms of locations and transportation channels (IEA 2010; Xinhua 2008). The focus on supply continued, and in 2011 the deputy director of the NEA stated that the government would ‘boost energy production and control consumption’ ‘to ensure energy supplies in 2011’ (Xinhua 2011a). Later in the year the head of the NEA suggested controls on consumption were necessary as ‘energy security is our permanent concern as our country’s natural resources are inadequate’ (Xinhua 2011b). In early 2012 he outlined plans for ‘boosting reserves of oil, natural gas and coal in 2012’, all in the name of ensuring ‘a stable energy supply’ (Xinhua 2012). The 2012 white paper pointed to increasing strain on energy supplies caused by growing consumption (PRC Central Government 2012b: preface). It also mentions ‘grave challenges to energy security’, listing China’s increasing dependence on ‘foreign energy sources’ in recent years, particularly oil (PRC Central Government 2012b: section I). It continues the focus on domestic supplies, suggesting that ‘as a large developing country with a population of over 1.3 billion, China must rely on itself to increase the energy supply steadily to satisfy such demands’ (PRC Central Government 2012b: section V). However, a later section links back to the international, stating that ‘energy security is a global issue. Few countries can secure their energy supply without international cooperation’ (PRC Central Government 2012b: section IX).



Overall, the key threats to domestic supply security that are discussed are growing domestic demand, low efficiency and lack of resources, as well as environmental pressure. In terms of international supply security, the threat referenced is increasing dependence on foreign oil and gas, and unstable international markets, as well as potential political instability in energy-exporting regions (PRC NDRC 2005, 2007a).

The other side of this theme is price security. Concerns over price stability largely relate to imports and therefore primarily oil, as China's domestic energy prices remain partly state-regulated though there is increasing marketization of prices. International energy prices have remained a concern throughout the period under study. At an APEC (Asia-Pacific Economic Cooperation) summit in 2005, President Hu stated that '[s]ince 2004, the surge of oil prices in the international market has affected the economic growth of the whole world, developing countries in particular' (PRC Foreign Ministry 2005). This is a clear concern for China, and the following year Hu reiterated similar feelings at a G8 meeting, pointing to rising prices as hurting 'the interests of both oil producers and consumers...the international community needs to...take a comprehensive approach to address the problem' (PRC Foreign Ministry 2006). The international dimension is clear here, as increasing marketisation within China as well as increasing reliance on imported oil have made China more vulnerable to volatile international energy markets. China's 2012 position paper to the UN similarly pointed to the need for cooperation to stabilise prices:

Joint efforts must be made to stabilize the prices of energy and other commodities and prevent excessive speculation and market hype, so as to meet the energy demands of all countries, particularly the developing countries, and maintain order in the energy market (PRC Central Government 2012a)

The impact of international energy prices on domestic supply are considered increasingly serious, with the 2012 white paper suggesting that 'price fluctuations in the international energy market make it more difficult to guarantee domestic energy supply...[i]t will not be

easy for China to maintain its energy security since its energy [read oil] reserves are small and its emergency response capability is weak' (PRC Central Government 2012b: section I). Furthermore, China's white papers highlight the need to marketise China's domestic energy system, including price reforms (PRC Central Government 2012b; see also Kennedy 2010). However, the focus of discourses on prices remains on the international level, with pledges for China to work with other countries 'to maintain stability of the international energy market and energy prices' (PRC Central Government 2012b).

The key threat identified here is rising prices which damage economic growth. Soaring international oil prices are said to threaten supply (Xinhua 2006b). Meanwhile, because of the volatility of the international market there are calls for continued or even increased reliance on domestic coal, as it is cheaper than importing oil or gas and not subject to volatile international prices (NDRC 2005). Ultimately, the focus on supply and price security enables a continued focus on domestic production and consumption of fossil fuels.

#### ***5.4.2 Importance of energy: national security and economic growth***

Energy is essential for maintaining both economic security and national security (PRC NDRC 2005), though the two are hard to separate. Like in the US, energy security as a term is commonly used. This section looks at how energy is constructed as important, as essential for national security and economic growth, in which the role of energy in development plays an important part.

A 2003 report from China's Energy Strategy and Policy Research Group noted that 'energy security, especially oil security, is increasingly important' (Chen et al. 2003). Likewise, the 2007 white paper states that 'energy is an essential material basis for human

survival and development’ (PRC NDRC 2007a: preface). In a 2011 white paper on China’s development, energy is listed as a ‘common security issue’ that states need to cooperate on, alongside other common security challenges including terrorism, financial crisis, and climate change. These are listed as common security threats ‘to the world’, and ‘have a major impact on human survival and sustainable economic and social development’ (PRC Central Government 2011: section IV). In a speech to the EU in 2012, China’s (then) Prime Minister in-waiting Li Keqiang noted that ‘China attaches great importance to energy supply and security, as energy provides the basic conditions for economic and social development’ (PRC Foreign Ministry 2012a). This idea has been reiterated in a number of venues, including at the UN (PRC Central Government 2012a). Energy appears to be rising in importance in China, and in the 2012 white paper it was said to be ‘the vital material base for China to modernize and build a moderately prosperous society’ (PRC Central Government 2012b: conclusion).

Energy is also increasingly linked with national security, and often referred to directly as a security issue, both in domestic statements and international speeches – at the UN in 2005 President Hu listed energy security as a non-traditional security issue posing a ‘severe challenge’ to development (Hu 2005a). There have been repeated calls for a law to ensure energy security (PRC Central Government 2005a). Energy security is now considered a key issue for the policy agenda, and as required to maintain both ‘economic security and national security’ (PRC NDRC 2006). Even energy efficiency is considered a strategic issue (PRC Central Government 2006b). Energy is consistently listed as a new or ‘non-traditional’ security threat by officials. The 2012 white paper reiterates this, calling energy ‘a major strategic issue for China’ (PRC Central Government 2012b: preface), noting

China's growing 'dependence on foreign energy sources', with a special emphasis on imported petroleum (PRC Central Government 2012b: section I).

The role energy plays in economic growth and economic and social development is continually highlighted in these discourses. Economic growth as emphasised here is often national, but sometimes also global, with statements like the following:

We should step up worldwide energy dialogue and cooperation, jointly maintain energy security and energy market stability, and ensure a well-supplied, secure, cost-effective and clean energy environment conducive to global economic growth (Hu 2005b)

At an APEC summit the same year, Hu noted the need to address 'the growing constraint of energy, resources and environment on economic development' (PRC Foreign Ministry 2005). Likewise, he pointed to energy as a 'global issue', 'indispensably linked with world economic development', and said that the international community needs to handle the energy issue well 'to achieve balanced and orderly growth in the world economy' (PRC Foreign Ministry 2005). Energy is noted as a key issue when it comes to ensuring continued economic growth, with energy conservation and cutting pollution noted as important while making 'arduous effort to ensure that China's economy keeps steady and fairly fast growth' (Hu at APEC, PRC Foreign Ministry 2007). As part of this, Xi Jinping (then President in-waiting) said in 2008 that 'China will try to meet the demands for economic growth and the improvement of people's life by increasing domestic energy supply' (Xinhua 2008). As part of this, China will continue to rely on coal to fuel economic growth, though in a 'greener fashion' (Xinhua 2010c).

As a part of the link between energy and economic growth, energy is also said to be linked with economic development (PRC Foreign Ministry 2005). The 2007 white paper on energy sets out 'developing its economy and eliminating poverty' as the main task for the

Chinese government (PRC NDRC 2007a: preface). China's pursuit of a 'stable, economical, clean and safe energy supply system' is done to 'support the sustained economic and social development' (PRC NDRC 2007a: section II). Economic and social development remains key to China's energy industry targets (PRC NDRC 2007a: section II). The link between energy and development is central to justifications for increasing energy consumption, and is a key theme in the discourses surveyed. In 2012, Li Keqiang noted,

As one of the major economies and the biggest developing country in the world, China attaches great importance to energy supply and security, as energy provides the basic conditions for economic and social development (PRC Foreign Ministry 2012a)

Likewise, the 2012 white paper retained this focus on development, noting that energy is 'an indispensable basic condition for the development of modern society' (PRC Central Government 2012b: preface). This is often also linked back to the international level, with statements like, 'China's energy development not only guarantees domestic economic and social development, but also makes significant contributions to global energy security' (PRC Central Government 2012b: section I).

Chinese discourses on energy continually represent energy as important, as an issue of human survival, as well as necessary for national security and for economic growth, which is often linked with development. It is becoming increasingly important due to growing consumption. The focus on economic growth enables continuing focus on production and consumption of fossil fuels in the name of economic growth and development. The key threat evident in this theme is lack of economic growth, which would have a serious impact on political legitimacy and national security. Occasionally, growing consumption is also noted as a threat. Interestingly, while the state remains the focus as referent object to be secured in energy terms, two other referent objects are also present in these discourses –

global energy security is frequently promoted, and energy is also occasionally linked with human survival.

#### ***5.4.3 The importance of a stable international environment***

The need for a stable international environment and cooperation to ensure energy security is another key theme in Chinese energy security discourses. It is closely linked with the growing emphasis on stable international markets to avoid price volatility for imported oil. An important sub-theme in this area is the idea of global, or ‘common’, energy security, which will be discussed at the end.

Cooperation on energy is particularly emphasised by leaders in speeches with an international audience. The global nature of energy security is emphasised, particularly with both increasing marketisation of energy within China and with increasing reliance on imports, as China becomes more vulnerable to unstable international energy markets. A number of aspects for cooperation are noted, including ‘protection, conservation of energy as well as the development of new energy’ (Wen 2004). Overall, ‘China is ready to strengthen energy dialogue and cooperation with all countries, to jointly maintain energy security and stability of the world’ (PRC Foreign Ministry 2005). Energy director Zhou called ensuring ‘world supply capacity through sufficient investment in energy production’ one of China’s key objectives in international energy cooperation (PRC Central Government 2006a). Energy was emphasised in a number of bilateral meetings with both energy producers and consumers, including Japan and South Korea, India, the US, the EU, and Saudi Arabia.

It is often noted that China needs to get more involved in international energy organisations, including the IEA, of which China is still not a member (PRC NDRC 2006).

The 2007 white paper points to ‘strengthening international cooperation in the field of energy’ as a key priority (PRC NDRC 2007a: section VIII). It also suggests that,

The international community should work collaboratively to maintain stability in oil producing and exporting countries, especially those in the Middle East, to ensure the security of international energy transport routes and avoid geopolitical conflicts that affect the world’s energy supply (PRC NDRC 2007a)

The emphasis on cooperation is tied in with a desire to not be considered a threat, as can be seen in a number of statements, including an NDRC official pointing to the white paper as increasing transparency which should aid cooperation and show that China is not a threat, as when ‘it comes to international energy cooperation, China's development is inseparable from the world’ (PRC NDRC 2007b). There is continued emphasis on China’s desire to ‘enhance energy dialogue and cooperation with other nations’, (Xinhua 2010e). Areas where cooperation is continually emphasised include policy coordination to ensure supply and stable international markets, as well as dealing with energy emergencies (Xinhua 2006c; see also Hu 2011a). Joint efforts to stabilise energy supply to meet all countries’ energy demands is also key (PRC Central Government 2012a).

The emphasis on cooperation remains key in the 2012 white paper (PRC Central Government 2012b: section II), which notes that ‘China did not, does not and will not pose any threat to the world's energy security’ (PRC Central Government 2012b: conclusion). It also states that China

will further strengthen its cooperation with other energy producing and consuming countries as well as international energy organizations, and work together with them to promote a sustainable energy development around the world. It will strive to maintain stability of the international energy market and energy prices, secure the international energy transportation routes, and make due contributions to safeguarding international energy security and addressing global climate change (PRC Central Government 2012b: conclusion).

However, while some discourses emphasise cooperation and reliance on international markets, there is also a perception that while there is scope for cooperation between China and the United States on energy, their bargaining power is asymmetric, and therefore ‘there is a need to rely on international organisations to achieve China's national interests’ in order to avoid disadvantage (PRC NDRC 2006). Likewise, it is widely accepted that ‘energy is clearly also a geopolitical issue’ (Interview 2012i). In this sense, the state and national security remains at the centre of Chinese notions of energy security. More recently, China appears not only interested in expanded cooperation, but also in pursuing increased global energy governance. In 2012, Wen Jiabao suggested that in order to ‘stabilize the oil and natural gas markets, we may consider establishing, under the G20 framework, a global energy market governance mechanism...under the principle of mutual benefit’ (Wen 2012).

Lastly, the emphasis on cooperation and a stable international environment links with a focus on the idea of global, or shared, energy security. This is particularly common in speeches by leaders abroad. Calls for more dialogue are a key feature of this, and though global energy security becomes slightly less of a focus after 2010 the emphasis on cooperation and dialogue remains (for example, see Hu 2011c). At a G8 meeting, President Hu Jintao stated that ‘to ensure global energy security, we need to develop and implement a new energy security concept that calls for mutually beneficial cooperation...global energy security is crucial to ensuring the economic growth and people's livelihood of all countries and to maintaining peace and stability and promoting common development’ (PRC Foreign Ministry 2006). The need to maintain global energy security is often linked to high oil prices and the need for dialogue to stabilise the markets (PRC Foreign Ministry 2006). It involves both increased dialogue between consumers and



producers, and increased oil and gas exploitation to increase global supply to meet global demand at reasonable prices (PRC Foreign Ministry 2006). The 2012 white paper likewise mentions the need for ‘working together to maintain energy security’ including managing energy to ensure a stable global market and working together to avoid disruptions to supply (PRC Central Government 2012b: Section IX).

Interestingly, this theme shows a number of referent objects for energy security, particularly evident in statements such as ‘[Prime Minister] Wen pointed out that energy security is of great significance to the national economy and the people's livelihood as well as to ensuring a full recovery and long-term development of the world economy’ (PRC Foreign Ministry 2012b). It is heavily related to market and price security, as well as strategic supply security, as a stable international environment and international cooperation over energy underpins all of these.

#### ***5.4.4 Energy self-sufficiency and the importance of domestic supply<sup>9</sup>***

Continued reliance on domestic supply is another key feature in Chinese energy security discourses. It also links in with the desire for China to not be considered a threat internationally, due to widespread international concern that China may buy up energy sources abroad thus taking them out of the international market. This section will discuss three subthemes, starting with the emphasis on self-sufficiency in energy. It then discusses the continuing focus on traditional sources of energy, before pointing to recent emphasis on new or ‘alternative’ energy.

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<sup>9</sup> This theme is very similar to US energy independence discourses. The title chosen here is different as the term ‘energy independence’ is not commonly used in China.

The role of the ‘domestic’ and self-sufficiency is key throughout the time period studied. Because of the problems of relying on the international market (price volatility and potential for supply disruption) self-sufficiency remains central to any discussion about China’s energy security. At APEC in 2005, Hu Jintao declared that,

Since the 1990s, China has always met over 90% of its overall energy needs on its own. As a country with coal dominating its energy structure, China still has a huge potential for domestic energy supply (PRC Foreign Ministry 2005).

In the same year, Vice Premier Zeng also suggested that China needs ‘security of supply based on domestic production’ (PRC NDRC 2005). The focus on the domestic as secure is key, with assistant foreign minister Cui stating that ‘the government aimed to meet its energy demands with domestic supplies, and would tap more resources and economize on consumption’ (Xinhua 2006a). China’s reliance on domestic sources is also often cited to explain why China is not a threat to global energy security (Ma 2007; PRC NDRC 2007b). The 2007 white paper also cites China’s reliance on ‘domestic energy resources’, repeating again China’s 90% self-sufficiency (PRC NDRC 2007a: section IV), a statistic cited in most speeches and documents discussing China’s supplies and energy security. In a speech in 2008, Xi Jinping (then Vice President) also emphasised the need to increase domestic supply, stating that ‘China will try to meet the demands for economic growth and the improvement of people's life by increasing domestic energy supply’ (Xinhua 2008). Boosting domestic production of coal, as well as importing more coal, and increased domestic oil and gas exploration are seen as essential to ensure energy supplies due to growing demand (Xinhua 2011a). The 2012 white paper reiterated that ‘as the world's largest energy producer, China mainly relies on its own strength to develop energy, and its rate of self-sufficiency has reached around 90 percent’ (PRC Central Government 2012b: section I). This is later reinforced as a key part of China’s energy strategy:

The country relies on domestic resource advantages...makes special efforts to enhance its energy supply capability and security, improves its emergency energy reserve and emergency response systems, and controls its dependence on foreign energy sources (PRC Central Government 2012b: section II)

Here the idea of secure domestic supplies is clearly juxtaposed with ‘dependence’ on foreign energy sources, which needs to be controlled.

Traditional sources of energy still play a key role in China’s energy security strategy, though conservation and efficiency is often emphasised (PRC Foreign Ministry 2005). However, because of the fear of increasing reliance on imported energy, coal remains central. Because of ‘chronic oil shortage’ and growing reliance on imports which can affect domestic supply, China needs to ‘vigorously develop coal’ as a petroleum substitute (NDRC 2005). Likewise, after the 11<sup>th</sup> Five Year Plan a senior government energy researcher suggested that while China will continue international cooperation to achieve energy security, ‘2006 to 2010, China will try to meet its energy demand mainly with domestic supply, and will take coal as the main source of energy’ (PRC Central Government 2006a). Hu in 2006 pointed to China’s ‘great potential for expanding energy supply from domestic sources’ (PRC Foreign Ministry 2006). The 2007 white paper stated that ‘China boasts fairly rich fossil energy resources, dominated by coal...China has built an energy supply framework with coal as the main energy resource and electricity as the focus, featuring an overall development of oil, gas and renewable resources’ (PRC NDRC 2007a: section I). Plans to increase natural gas production and develop greener coal technologies are often suggested, and in 2011 an NEA official said that China would see continued increased coal production and imports to fulfil demand, as well as a ‘focus on offshore oil and gas exploitation during the 12th Five-year Plan (2011-2015) period’ (Xinhua 2011a, 2012). The 2012 white paper also states that ‘worldwide, fossil energy, including coal and oil, will continue to play a dominant role in energy supply for a long

time to come. China is no exception. Therefore, China will continue to plan fossil exploitation and utilization, with environmental protection taken into account' (PRC Central Government 2012b: section V).

Increased reliance on imported oil is discussed as being a key problem, and there is a clear link between China's increasing desire for cooperation over energy and its growing need for, and concern over, imported oil. To some, this means that 'when you're talking about energy security in China, you're really talking about oil security' (Interview 2012g). Security of transport has also become key to Chinese notions of energy security, both in terms of domestic resources and imports (Interview with Gao 2012). Inside China, resources are unevenly distributed meaning 'large-scale transportation over long distances of coal and oil from the north to the south, and transmission of natural gas and electricity from the west to the east' (PRC NDRC 2007a: section I). The 2012 white paper notes increasing dependence on foreign energy sources as a 'grave challenge' to energy security, particularly the rise in imported petroleum to 57% of total consumption, as well as the 'ever-greater security risks' to 'marine transportation of petroleum and cross-border pipeline transmission of oil and gas' (PRC Central Government 2012b: section I). Increased domestic supply of fossil fuels is usually cited as the solution to deal with these potential threats.

Lastly, new or 'alternative' energy is an increasingly popular frame, playing a major part after the 12<sup>th</sup> Five Year Plan, with quantitative targets for renewables (15% by 2020), energy intensity, efficiency and conservation, as well as emissions targets (Xinhua 2010c). There has been increasing recognition of the need for improvements in clean energy technology (PRC NDRC 2005), with new energy considered a 'must' for China according

to the head of the NEA (Xinhua 2009). The 2012 white paper notes ‘rapid development in non-fossil energy. China has made energetic efforts in developing new and renewable energy resources’ (PRC Central Government 2012b: section I). It also reiterates key targets from the 12<sup>th</sup> Five Year Plan for National Economic and Social development for increasing non-fossil energy, reducing consumption per unit of GDP and emission reductions (PRC Central Government 2012b: section II).

The role of the domestic as secure and the need for self-sufficiency, contrasted with foreign energy sources constructed as insecure and volatile, plays a key role in justifying increased fossil fuel production in China. However, though the focus remains on fossil fuels, the same reasons are increasingly used to also justify new or alternative energies.

#### ***5.4.5 Alternative constructions of energy security***

Chinese official energy security discourses do use some alternative constructions of energy security which are rarely recognised in the academic literature. There are some indications of a broadening understanding of energy security to include sustainability and human well-being, particularly more recently.

There is an increasing variety in referent objects of energy security in Chinese discourses. World energy security, or common energy security, as a concept promoted by the Chinese government globally, has already been noted. The second theme also showed some indications of occasional emphasis on human survival. While the emphasis on national, or domestic, security remains, the inclusion of multiple referents of energy security is particularly interesting for this research. At the G8 meeting in 2006, Hu pointed to the need for increased cooperation on clean energy as ‘as part of the overall effort to ensure

sustainable development of human society' (PRC Foreign Ministry 2006). He also noted the need for global energy security to ensure 'people's livelihood'. The 2007 white paper points to the need to strengthen cooperation to protect global energy security 'to safeguard the stability and security of energy supplies in the world, strive to achieve mutual benefit, win-win and common development, and protect this home human beings share' (PRC NDRC 2007a: conclusion). Xi Jinping also justified increased domestic energy supply to meet demands for economic growth and improve people's lives (Xinhua 2008). The 2011 white paper on development mentioned energy security among global security issues that have 'major impact on human survival and sustainable economic and social development' (PRC Central Government 2011). The role energy plays in economic and social development is continually emphasised, which was also noted under the economic growth theme discussed earlier.

Sustainability, efficiency and conservation to improve the environment are also increasingly common topics in discussions on energy security. A 2003 report noted the importance of 'minimising the impact of energy production and consumption on the environment and health' (Chen et al. 2003). At APEC in 2007, Hu Jintao said that ensuring 'stable energy supply is a major factor contributing to building a sustainable future. Sufficient, secure, economical, clean and predictable energy supply is essential to sustaining the steady growth of the world economy' (PRC Foreign Ministry 2007). It is increasingly recognised that 'the development and use of energy, is one of the main causes of ecological destruction and environmental pollution' (PRC NDRC 2007b). Developing clean energy is seen as a new growth point in the economy, to 'adjust our energy structure, cope with global climate change, and ensure energy security' (Xinhua 2010d). The head of the NEA pointed to energy security as a 'permanent concern': 'China's population, natural

resources, environment and the need for sustainable development do not allow wanton consumption of energy resources' (Xinhua 2011b). The 2012 white paper also concluded that 'the Chinese government will strive to address the energy problem properly by following the sustainable road of energy development' (PRC Central Government 2012b: conclusion). At the 18<sup>th</sup> Party Congress in November 2012, Hu advocated the need for major progress on 'building a resource-conserving and environmentally friendly society...[e]nergy consumption and carbon dioxide emissions per unit of GDP as well as the discharge of major pollutants should decrease sharply' (Hu 2012).

Alternative discourses will be discussed further in the next chapter, but it is important to note that changes so far are minimal, with continued emphasis on coal as essential to ensure Chinese supplies. There is still a heavy focus on national security and securing enough resources of any kind to continue rapid economic growth. Continued heavy reliance on domestic coal supplies as justified in national security terms is particularly problematic. Official constructions of energy security still focus on securing supplies for continued national economic growth, and China remains the

most prolific emitter of greenhouse gases in recent years. Generally speaking, this development, and the threat of climate change more generally, has not been a driving force behind new thinking about energy security in China (Kennedy 2010: 145).

## **5.5 Conclusion**

To sum up, 'energy security in China is an evolving notion' (Interview 2012h). China is still going through a learning curve and there is 'no unified definition or approach to energy security', but meeting growing demand is central (Interview 2012h). Overall, Chinese notions of energy security emphasise the need for secure supplies at stable prices. Oil security is a priority as the key imported source of energy, while self-sufficiency remains a goal. In part because of fears over increasing reliance on imported energy, coal

remains central to Chinese energy supply. While the energy white papers and legislation emphasise conservation and sustainability, growing energy demand and consumption makes the effect negligible so far. When it comes to energy security, increasing domestic production of coal, oil and gas to ensure stable supplies and prices by keeping China self-sufficient in energy takes precedence over human and environmental security.

Official discourses place continued emphasis on fossil fuels, which enables continued production and consumption. Thus, because coal is domestically available, China should take full advantage of domestic coal resources to reduce dependence on foreign oil imports (NDRC 2005). In the name of ensuring ‘a stable energy supply’, continuing increases in oil, gas and coal production are sought through various energy exploration programs (Xinhua 2012). Likewise, the policy-making process places energy security, understood in national security terms, as the top priority. Ultimately, ‘security tops the environment in China’s energy plan’, and the priority remains on secure (domestic) sources of energy to fuel continued economic growth (Bradsher 2010). The ‘domestic’ and the need to secure it, is continually contrasted with the threat of dependence on ‘foreign’ sources of energy. Thus ‘China must rely on itself to increase the energy supply steadily to satisfy such [growing energy] demands’ (PRC Central Government 2012b: section V). Even calls for international cooperation and a stable international environment largely relate back to desire for continued oil supplies to ensure continued domestic economic growth.

In this sense, the state and national security remains at the centre of Chinese notions of energy security. Of course, economic development necessitates a rise in energy consumption, but it does not necessitate prioritising fossil fuels in the name of self-sufficiency. There are some indications of a broadening understanding of energy security



to include sustainability and human well-being, particularly more recently, and policy is changing to reflect this, but it will take time before it has any real impact on production and consumption patterns. Likewise, the variety in referent objects in Chinese official discourses is an interesting development, with discussions of global/common energy security as well as the impact on individual well-being and the environment. There is also now a recognition that ‘the development and use of energy, is one of the main cause of ecological destruction and environmental pollution’ (PRC NDRC 2007b).

## CHAPTER 6

**Towards a positive energy security**

The last two chapters have presented empirical analysis of state, or official, energy security constructions in the United States and China between 2004 and 2012. They have discussed both the policy choices that have been made and the discourses which enabled them, drawing out key themes in these discourses to understand how energy security has been constructed. This chapter begins by looking at these constructions through the lens of the emerging debate over the value of security, which was introduced in chapter two. As discussed in previous chapters, this thesis makes a normative commitment, arguing that the purpose of security policy should be to provide security for human beings, which cannot be separated from the environment on which they depend. Consequently, drawing on existing literature, ‘negative security’<sup>1</sup> is here understood as notions of security which centre around securing a national ‘us’ against a threatening and excluded ‘other’, and security practices which rely on processes or result in consequences which are negative in character – most notably narrowing democratic debate and participation, and militarised threat-defence responses. Negative security constructions do not secure human beings. In contrast, a ‘positive security’ approach is understood here as one employing a conception of security which does not rely on exclusion, securing human beings rather than citizens,

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<sup>1</sup> As noted in chapter two, this use of the term negative security differs somewhat from some of the previous uses, which draw on Berlin, Galtung or Wolfers to understand it as the absence of threat, rather than as something which is negative in character and consequences.

and which uses security practices that involve and include open political debate and participation. This is used to analyse existing energy security constructions to develop an understanding of what more positive and more negative energy security can look like, in an empirical context<sup>2</sup>.

Thus, the chapter opens with a discussion of state constructions of energy security in connection with this debate. It illustrates that state constructions are largely negative, presenting the state as the object to be secured through continuous supplies of fossil fuels, while marginalising alternative notions of energy security. However, the very existence of some alternative notions of energy security even in official discourses serves to illustrate that energy security is contested. The chapter then moves on to look more directly at alternative notions of energy security which are considered to be more positive. It looks both at marginalised state energy security constructions, and constructions produced by non-state actors, focusing on non-governmental organisations advocating for a change in energy policy. This is used to illustrate that ‘energy security’ does not have to be negative, which opens up potential for change. In this regard, this chapter follows the pragmatic, contextual approach outlined in chapter two, starting by looking at cases where energy is constructed more positively and using this to develop a more detailed understanding of what a positive energy security looks like. Following ‘a broader approach to the construction of security’ (McDonald 2008: 565) that goes beyond securitisation and elite voices, this chapter is a vital part of answering the question of how energy security is constructed in the United States and China. Importantly, it also works to denaturalise dominant ‘common sense’ understandings of energy security by highlighting contestation over energy security, which in turn opens up the potential for change.

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<sup>2</sup> The emphasis this thesis places on empirical practice and context makes the definitions of negative and positive security a guide rather than a taxonomy of absolutes, to be used to locate alternative notions of energy security that rely on a more positive notion of security.

## **6.1 What do dominant state energy security constructions do?**

As stated in chapter two in the discussion on the value of security, security has been labelled negative by a number of critical authors (including the Copenhagen School), making desecuritisation preferable. Other authors – notably those coming from a Welsh School approach – have argued that security is not inherently negative but can, and some have argued should, be about positive, enabling values. Problematically, this debate is rather clouded by a lack of distinction between the term ‘security’ and ‘securitisation’ in much of the critical literature. In contrast, it is argued here that securitisation represents only one particular type of security construction. Security is constructed in varied and often unpredictable ways. It is constructed by a wide range of actors, in different ways in different contexts – sometimes more negatively, and sometimes more positively. While the emerging literature on positive and negative security partially recognises this, producing some useful guidelines for understanding when security is positive and when it is negative (Roe 2008, 2012; Floyd 2007, 2011; Hoogensen Gjørsv 2012), the discussion remains largely at an abstract, theoretical level and remains closely tied to discussions on securitisation.

In contrast, this thesis argues that security has no inherent meaning, and therefore cannot be intrinsically positive or negative. We can only analyse the meaning and value of security in empirical contexts, where the value ranges from more negative to more positive. Thus, while securitisation theory dismisses security as a concept with negative associations and consequences, I argue that the concept of security is often positive. Moreover, locating more positive constructions of security in practice begins to disrupt traditional, more negative notions of security, and as such can open up space to move towards more positive constructions of security. It is also important to note that as they are

understood here, positive and negative security are not binary opposites. In practice, most security constructions likely fall somewhere between the two – being rather ‘more positive’ or ‘more negative’, or somewhere in between, than either/or. In this sense, the value of security is better understood as a continuum or spectrum rather than a clear-cut binary. Even in official discourses, though these are characterised here as largely negative, there is contestation, both between strategic/realist and liberal/economic notions of energy security and between more negative and more positive notions. The more positive constructions of energy security in state discourses are a more recent development, which suggests that more positive notions of energy security are possible. Thinking explicitly about alternatives is an essential part of advocating change and involves a discussion about what kinds of definitions of (energy) security create potential for more ethical practice: which are better and which are worse when it comes to actually providing security.

Constructions were analysed to understand what security does to energy. The methods used for this have been outlined in chapter three, which discussed the way in which particular constructions create a reality, or a ‘common sense’, which makes particular policy choices thinkable and possible, while simultaneously making other policy choices less likely. In this way, texts construct a reality where particular practices seem ‘reasonable and probably quite unremarkable’ (Doty 1993: 308). Questioning and problematising these processes is a central goal of this analysis. Texts were analysed with a focus on presuppositions and predications, and how these create subject positions which together work to make particular policy choices possible while excluding other options.

The two previous chapters have outlined and analysed dominant state energy security constructions in the United States and China. They have illustrated the centrality of

‘security of supplies at stable prices’ to understandings of energy security in both states. Overall, there is a link between energy security and a very particular understanding of national security, which has three core features. Firstly, the state is reaffirmed as both the sole actor and speaker of ‘security’, and as the primary object to be secured. National security is understood to entail autonomy in energy terms, phrased as ‘energy independence’ in the US, and ‘self-sufficiency’ in China. Secondly, traditional geopolitical security boundaries and identities are reproduced, with an ‘inside’ to be protected against external ‘others’. The geographically-delimited state, and its independence in energy terms, is distinguished as that which needs to be protected or secured, against external ‘foreign’ others, who may be ‘hostile’ and may cause ‘harm’. These ‘others’ do not need protection or security but are instead a threat, causing ‘dependence’ and ‘vulnerability’. Thirdly, linking energy with national security both elevates it above other issues in importance, and can enable extraordinary measures. Energy is constructed as key for maintaining ‘national power’ and independence, even state survival. In liberal/economic discourses the focus on national economic growth and competitiveness plays a similar role. Dependence on others is constructed as a threat, and energy independence or self-sufficiency as the main goal, rather than, say, sustainability. Some liberal discourses emphasise the preservation of open and stable markets, but again, in the official discourses analysed here this is largely related to the need for continuous supplies of fossil fuels for national economic growth. In policy terms, this separates and elevates energy supply above the security of human beings and a secure and stable climate and environment.

Overall, this research is concerned with how official constructions of energy security both legitimise and marginalise through particular constructions of common sense, enabling

particular policy choices in the name of energy security, while delegitimising others. The link between energy security and a very particular understanding of national security justifies, underpins and reproduces a negative construction of security. These negative energy security constructions emphasise the need to secure ‘us’ against ‘them’, which has negative consequences, producing insecurity and enabling state-centred responses. They also work to narrow democratic debate and participation, disempowering non-state actors and closing down the meaning of energy security through particular constructions of ‘common sense’. This results in an energy security paradox, whereby *state pursuit of energy security makes states, individuals and the environment less secure*. In many ways, the link between energy and national security in these dominant constructions mirrors how security is understood by the Copenhagen School. While energy is rarely fully securitised, it is subjected to repeated securitising moves in both states – with elite ‘speech-acts’ following the ‘grammar of security’ emphasising priority, urgency and survival (Buzan et al. 1998: 33). Likewise, the consequences are similar to the consequences of securitisation, with ‘threat, defence, and often state-centred solutions’ (Wæver 1995: 65). However, while energy is repeatedly subjected to securitising moves, emergency measures are rarely possible (for an exception, see Nyman 2014). Consequently, they are here understood as ‘negative’ energy security constructions.

### ***6.1.1 Securing state supplies of fossil fuels: reproducing insecurity***

These negative energy security constructions emphasise the need to secure ‘us’ against ‘them’, which has negative consequences, producing insecurity and enabling state-centred responses. Interestingly, the meaning of energy security is rarely openly discussed or defined in official discourses, even in legislation on energy. This constructs the meaning of energy security as common sense, suggesting that it does not need to be discussed, making

policy choices appear obvious and difficult to question. Meanwhile, in reality the way in which policy-makers use the terms ‘energy’ and ‘energy’ security are often vague (Littlefield 2013). Policies and actions are undertaken in the name of energy security, or justified in its name, without defining or discussing what energy security means. However, the dominant themes noted in the previous two chapters show the continuing focus on ensuring secure supplies at stable prices.

Throughout, energy is constructed as important, as national security and economic growth. Both of these priorities construct the state as the object to be secured – whether in strategic or economic terms. They delineate a boundary between a national inside, or ‘us’, to be protected, against external threats in the form of threatening ‘others’. The ‘outside’ is constructed as unstable and insecure, with a focus on the possibility for supply disruptions and market volatility. The state is to be secured as autonomous in energy terms, which enables a focus on maximising ‘security’ through strategic or economic competition against threatening others<sup>3</sup>. This enables a zero-sum view of energy security, where each state needs to maximise its own supplies to ensure national strategic/economic power or growth. Following this, both US and Chinese discourses construct ‘dependence’ on others as a threat, as these ‘others’ may be ‘hostile’. The aim of energy security politics is to secure the state’s own supplies at the best prices possible, against dependence or reliance on ‘others’, making energy independence the key goal. On a fundamental level, they rely on a distinction between the state, the ‘us’, to be protected – against external enemy ‘others’ – what Walker terms a system of ‘spatial exclusion’ (1988: 121). Rather than

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<sup>3</sup> The link between security and exclusionary friend/foe thinking has also been discussed by the Copenhagen School, who view these as inevitable features of security politics. However, this understanding of security is heavily influenced by Schmitt, who understood the ‘political’ as characterised by antagonism and friend-enemy distinctions (Williams 2003: 516). This is particularly useful for understanding how these negative energy security discourses and practices work. For a more in-depth discussion on the influence of Schmitt on the Copenhagen School’s concept of security, see Williams (2003) and Huysmans (1998b).



securing people, therefore, the emphasis remains on securing ‘our’ citizens against external ‘others’. Even where liberal discourses in both states emphasise marketisation, and the need for stable international energy markets as a source of security, it is often related back to the need to maximise US/Chinese national economic growth vis-à-vis other states.

By constructing the state as the object to be secured, dominant state energy security constructions produce insecurity, through the reproduction of friend/foe, threat-defence thinking, and by prioritising the security of the state above the security of human beings and the environment they depend on to survive. Firstly, this works to cause insecurity for the states themselves. Focusing on securing ‘us’ against ‘them’ in energy terms encourages competition over limited and finite resources, reproducing energy security dilemmas and encouraging continued and often increased exploitation of finite and unsustainable (domestic) energy resources in the name of autonomy, national security and continued economic growth. By continuing to reproduce a competitive exclusionary logic, they encourage competition to maximise their own supplies of finite unsustainable resources rather than cooperation to develop more sustainable energy resources that could provide longer-term energy, environmental and human security, as well as further inter-state stability. Current discourses construct cooperation with other states as either unnecessary or directly harmful<sup>4</sup> – as in the discourse on energy independence; or at best difficult, as ‘foreign’ states are continually constructed as potentially hostile and different. This has also led to increasing fears of resource wars (see Klare 2002, 2008). Thus, the argument that security needs to move away from traditional geopolitical premises is not simply a case of ethical preferences, but of ‘strategic necessities’ (Burke 2013: 21). The reproduction of the state as the referent of energy security limits practices to securing the

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<sup>4</sup> Cooperation over fossil fuels is rare, though it is becoming more common in renewable technologies and unconventional technologies – including shale gas.

state, or rather, the continued existence of the particular political order, and allows continued rejection of the security of other referent objects even where current practices directly make other referent objects insecure. This enables policy choices which secure the state and its citizens' fossil fuel supplies at the expense of international cooperation and climate stability, endangering the future of the planet and ultimately failing to secure human beings – while also making states less secure.

The focus on national security prioritises the security of the state above other referent objects. Dominant state discourses construct the need to secure states by ensuring continuous supplies of fossil fuels as common sense. As noted in chapter one, the very notion of security of supplies is linked to fossil fuels, as the only energy resources which are geographically bound to territory and therefore need to be physically supplied from one state to another. Likewise, the notion of secure and stable prices implicitly puts the emphasis on security of oil supplies and oil markets, as the main energy resource which is traded on a global market. Moreover, the focus on state autonomy in energy terms is emphasised throughout in both states, and the answer to the energy security dilemma as presented in these discourses is continued and increased exploitation of domestic fossil fuels, both in the US and China. This includes continued and increased exploitation of, and consumption of, conventional and unconventional oil and gas (including shale), and coal. These practices are a continuing cause of insecurity for human beings and the environment in which they live. These sources of energy are major causes of climate change and threaten the survival of the global ecosystem.

Both states prioritise investment in fossil fuels, particularly in unconventional oil and gas technologies, as well as 'clean coal' technologies and nuclear power, as these energy

sources are domestically available and therefore seen as more 'secure'. Likewise, there is a separation between 'energy' and 'climate' issues in both states, with energy continually prioritised as a national security issue. However, internationally, 'the burning of fossil fuels to produce energy is by far the main source of anthropogenic greenhouse gas emissions' (International Energy Agency 2007: 28), which contribute to climate change. Meanwhile, a recent study into solutions to global warming, air pollution and energy security which took the three as linked, found that clean coal technologies and nuclear investments provided 'less benefit with greater negative impacts' (Jacobson 2009: 170). If climate change and air pollution are also considered, fossil fuels ultimately no longer provide security. It concluded that 'because sufficient clean natural resources (e.g. , wind, sunlight, hot water, ocean energy, gravitational energy) exists to power all energy for the world...the diversion of attention to the less efficient or non-efficient options represents an opportunity cost that delays solutions to climate and air pollution health problems' (Jacobson 2009: 170). Problematically, much of US investment in 'cleaner' energy is devoted to clean coal technology research and the development of biofuels, particularly ethanol. However, 'no large [coal] power plant currently captures CO<sub>2</sub>' (Jacobson 2009: 152). Likewise, ethanol 'does not improve US energy security; is uneconomical; is not a renewable energy source; and increases environmental degradation' (Pimentel 1991). Climate change in turn, is also linked with sea-level rises caused by melting polar regions, droughts and famine associated with increased temperature levels and more extreme weather overall, as well as increased frequency of natural disasters including cyclones and hurricanes, among other things. These all contribute to increasing cross-border human insecurity. Climate change has also been attributed to increases in disease, including malaria, diarrhoea and dengue fever (World Health Organisation 2002).

Likewise, the burning of these fossil fuels contributes to air pollution which is a major cause of health insecurity. It has been associated with ‘a broad spectrum of acute and chronic health effects’, including ‘lung cancer and other cardiopulmonary mortality’ and as causing 800,000 deaths annually (World Health Organisation 2002). Air pollution is also a cause of acid rain, which contaminates food supplies and damages ecosystems. The impact of air pollution in China is increasingly well-documented and to a large extent attributable to its heavy reliance on coal:

In 2007...the World Bank estimated that outdoor air pollution in China was causing between 350,000 and 400,000 premature deaths each year, more than Chinese historians estimate their country suffered in the Korean War. Sensitive to the outrage such figures could produce, the Chinese government insisted that the World Bank not publish the figures, citing threats to “social stability” (Kennedy 2010: 145).

The effects of air pollution on public health in the United States is also well documented (Environmental Protection Agency 2013). Not only do these sources of energy threaten the environment and the health of millions of people – particularly bearing in mind that air pollution does not stop at national borders, moreover, fears of economically disadvantaging fossil fuel energy industries continue to limit action.

Beyond these global insecurity costs there are also local environmental and human insecurities produced as a result of these energy security policies. These relate largely to the production processes for oil, gas and coal for energy. Among these are coal mining deaths, which are prevalent in China, where 75,572 people died in coal mining accidents in 2011 (Aredy 2012). This category also includes oil and gas exploration accidents causing major pollution, including the BP Deepwater Horizon oil spill in 2010 in the Gulf of Mexico, and in the same year, a major oil spill in Dalian in Northeast China, and the 2011 Bohai Bay oil spill, also in Northeast China. These all damaged ecosystems and local livelihoods. The recent rush for shale gas in both the US and China has also caused

environmental concerns, particularly regarding air and water pollution resulting from hydraulic fracturing, or ‘fracking’, processes.

The argument here is not that it is in some way wrong for a state to be concerned about its energy needs, as energy supplies are clearly necessary for the continued functioning of human society as we know it. The problem, rather, is the focus on strategic autonomy, expressed in the need for energy independence to exclusively secure the national self against external threatening others, the solution for which is presented as vastly increased domestic production of fossil fuels, further enabled by legislation and a problematic policy-making process/set up where energy and climate remain considered largely in isolation from each other. Ultimately, current dominant state energy security constructions continue to focus on securing state fossil fuel supplies. In the process, they make states, human beings and the environment less secure.

### ***6.1.2 Narrowing democratic debate and participation***

Dominant state constructions of energy security also work to narrow democratic debate and participation, disempowering non-state actors and closing down the meaning of energy security through particular constructions of ‘common sense’.

These dominant constructions also disempower by reinforcing the role of the state as the national security provider – as the sole actor and speaker of security. Likewise, this works to marginalise other voices and limit contestation. The reproduction of the state as the single actor means that only the state is authorised to legitimately speak or define energy security. Energy security is constructed and defined by a small number of situated, elite actors working in various parts of the security establishment, with little or no input from

non-elite, non-state actors, or even from other government departments working on related issues such as climate security. Energy and climate remain separated in policy-making processes, and generally ‘you don’t find the same people in both circles’ (Interview 2012e). Only the state understanding of energy security is really recognised, and it sets policy priorities even when the domestic system is market based, through legislation and regulation guiding subsidies, tax cuts and exploration for new resources. The state not only defines what energy security is, but how it should be dealt with, or rather, how energy insecurity is to be eliminated or reduced. Consequently, the need for energy security ends where the physical state ends – only continued supplies for the actor-state are to be secured. Thus the national security state defines and provides energy security for itself on its own terms. The reproduction of the state as the single speaker and actor limits practices to securing the state, or rather, the continued existence of the particular political order, and allows continued rejection of the security of other referent objects even where current practices directly produce insecurity.

As the later sections in this chapter illustrate, dominant understandings of energy security are presented as common sense, but are in reality both limited and narrow, attempting only to secure the continued existence of the state. Meanwhile, other actors and voices are attempting to challenge this understanding, but are marginalised. The isolation or ‘elevation’ of security issues away from regular debate is deeply problematic, marginalising and disempowering. In many ways, this reflects the concerns that the Copenhagen School have with the politics of security. However, these characteristics are not inevitable features of ‘security’ – as the discussion on ‘contesting energy security’ in this chapter shows. Official constructions of energy security both legitimise and marginalise through particular constructions of common sense, enabling particular policy

choices in the name of energy security, while delegitimising others. It is essential to consider the role of power in these processes, and ‘the way in which power works to constitute particular modes of subjectivity and interpretive dispositions’ (Doty 1993: 299). Disempowering energy security practices limit contestation and participation in debates over the meaning and practice of energy security to state actors reproducing a particular, traditional notion of (national) security. This is neither democratic nor does it produce security beyond protecting the continued existence of the state. In many ways, it actually produces insecurity.

Even where the state constructions of energy security are more positive, as noted in previous chapters, these discursive constructions rarely filter into policy and remain marginalised. This separation between discourse and practice is interesting, and suggests these more positive notions of energy security are not established enough to have an effect on policy. However, their very existence in state discourses shows that alternative constructions of energy security are possible. Nevertheless, negative constructions remain dominant. The lack of voices and interests represented in debates leaves a limited understanding of energy security, which ultimately leaves power where it is. Thus, while securitisation theory argues that such a narrowing of debate is inevitable in security politics, I argue here that it is attached to a particular *national* security politics, suggesting that more democratic and positive notions of security politics are possible.

Walker’s study of critical social movements emphasised the need for ‘greater democratic participation in security issues...[as] security issues cannot be left to elites capable of insisting on the necessary convergence of their interests with those of the nation’ (1988: 125). Ultimately, elite actors have a vested interest in securing the continued existence of

the existing order. Allowing more contestation over energy security, meanwhile, allows more voices with different interests to articulate alternative notions of energy security. Overall, ‘the opening up of dialogic space enabling multiple voices to “speak” security’ is an essential part of making possible progressive change in dominant energy security discourses (see McDonald 2012: 4). In many ways, this draws on Habermas’ notion of communicative ethics (1979, 1981). Naomi Head has developed this to argue that communicative ethics can be used to ‘interrogate the intersubjective validity of claims to legitimacy raised by actors in particular contexts’ (2012: 198). This in turn both ‘reveals the operation of relations of power and domination in communicative practice’ and ‘opens up possibilities for the inclusion of those actors and discourses which are typically marginalised and lack recognition in international politics’ (2012: 198-9). She suggests there is a relationship between communicative processes and legitimacy, which is relevant here. Ultimately, there is a need for ‘fair and reflective procedures’ that include a larger number of actors and discourses to develop legitimate policy (Head 2012: 197). Hoogensen Gjørsv has also made the case for the inclusion of a wider range of actors in security processes, arguing that positive security needs to be ‘multi-actor’ (2012).

Dominant state constructions of energy security are negative in character and consequence: they reproduce insecurity for states, human beings and the environment, and narrow democratic debate and participation, disempowering non-state actors and closing down the meaning of energy security through particular constructions of ‘common sense’. However, these meanings are not fixed but constructed, and can therefore be contested. The rest of this chapter will look at alternative, more positive notions of energy security in the United States and China, highlighting the contested nature of the concept.



## 6.2 Contesting energy security

As noted in the introduction, ‘positive security’ is understood here as notions of security which do not rely on exclusion, securing human beings rather than citizens, and which use security practices that involve and include open political debate and participation. This section uses this to analyse existing alternative energy security constructions to develop an understanding of what more positive energy security can look like in an empirical context. In this sense it contributes to the empirical examination of the concept of energy security in the United States and China put forward in chapter four and five. By illustrating how energy security is constructed in both official and non-official spaces, it hopes to show that energy security both can, and is, being conceived differently – though these alternative constructions remain marginalised. In this process, it also looks outside dominant discourses in an active search for alternative, more positive constructions of energy security in the United States and China. It thus looks both at marginalised state energy security discourses, and discourses produced by non-state actors, focusing on non-governmental organisations advocating for a change in energy policy. In this way, the research moved between official and marginalised constructions to illustrate the contested nature of energy security, opening up the meaning and illustrating that energy security does not have to be negative, providing potential for change.

Consequently, this chapter follows the pragmatic, contextual approach outlined in chapter two, starting by looking at cases where energy is constructed more positively and using this to develop a more detailed understanding of what a positive energy security looks like. Following ‘a broader approach to the construction of security’ (McDonald 2008: 565) that goes beyond securitisation and elite voices, this chapter plays a vital part in answering the core research question of this thesis, which asks how energy security is constructed in the

United States and China. A process of ‘identifying how marginalised actors or subjugated voices have articulated...[the key concepts, is used] as a basis for exploring what alternative discourses might look like’ (McDonald 2007). Here, I define marginalised voices as alternative representations of energy security which are ignored in the dominant constructions of energy security. It is important to note that these remain marginalised – even when they exist in state discourses.

The examination of these streams of resistance to negative constructions of energy security involves a normative commitment to not just ‘leaving power “where it is” in security terms’ (McDonald 2008: 4). It also recognises the need to demonstrate the ‘complexity of security’ rather than close off the debate (Hoogensen and Rottem 2004: 169). There has been a limited number of empirical analyses of contestations of security outside of the official sphere, with the exception of Hoogensen (2012) and McDonald (2012). The approach taken here brings together a number of different approaches to the construction of security, with a focus on positive security and resistance and a normative commitment. It departs from securitisation theory, which cannot envisage change within ‘security’ but only through desecuritisation. Likewise, it departs from Booth’s notion of emancipation, by suggesting that more positive or emancipatory understandings of security cannot be imposed but rather have to be located in existing practices. Here, it draws instead on Wyn Jones and McDonald’s alternative understanding of emancipation, based on locating alternative progressive notions of security in practice as a basis for change (Wyn Jones 1999; 2005; McDonald 2012). Rather than imposing an abstract notion of emancipation, therefore, the emphasis here is on resistance and contestation – alternative practices – and giving marginalised voices the power to speak security, without ignoring traditional voices. This also departs from the existing debate on positive and negative security,

suggesting that once the meaning of energy security is opened up, starting analysis with an empirical focus to analyse how it is articulated in practice rather than imposing abstract theoretical definitions, it becomes increasingly clear that security can be more positive or more negative when attached to energy, depending on how security is constructed.

This analysis of marginalised discourses presents only a starting point, illustrating contestation rather than the entirety of competing discourses. Only a limited number of groups have been looked at. Likewise, it is important to emphasise that it is not as simple as state discourses always being negative and non-state discourses being consistently positive. Many non-state writers and speakers take the same categories of analysis (national security, autonomy) as the dominant discourses, even when they dispute the official solutions to the ‘problem’ – ensuring maximised supply, offering alternative solutions within the same categories of analysis. There is not enough space here to fully engage with non-state discourses which support dominant discourses, though the literature review has covered academic work which supports it. Suffice to say that there are numerous groups which reiterate similar positions to dominant discourses<sup>5</sup>.

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<sup>5</sup> There are also a number of pro-market groups who believe the market will solve future climate/security issues (see, for example McFarlane and Olah 2013), and groups like the United States Energy Security Council, emphasising the need for more competitive energy markets (USESEC 2013). Likewise, groups like SAFE follow dominant discourses closely, advocating securitisation of energy: ‘too often, the energy security debate ignore traditional security matters. While energy policy and technological innovation must play an integral role in improving the nation’s energy security, all aspects of national power, including the military, diplomatic and intelligence services, need to be mobilised’ (SAFE 2013). Both of these groups were referenced in President Obama’s 2013 State of the Union. There are many links between these groups, think-tanks and the policy world, so they often follow similar themes to official discourses, which is why less space is devoted to them here. Likewise, it has meant looking beyond these communities for more positive alternative discourses of energy security.

### **6.2.1 State discourses:**

Chapters four and five briefly introduced alternative notions of energy security present in dominant discourses, these will now be discussed in more detail here as they remain marginalised in practice.

#### **6.2.1.1 United States**

While state constructions of energy security in the United States centre around national security and construct security largely in a negative way, there are some elements of more positive notions of energy security, as noted in chapter four. This section sets some of these alternatives up against the first section in this chapter, to illustrate the ways in which they differ from the more negative representations. The focus is largely on the later part of the time period under study, as there have been more positive notions of energy security in state discourses under Obama.

Firstly, there are some occasions where these discourses recognise multiple actors, both within and beyond the state. Many voices are represented in Congress when it comes to constructing energy security, but they rarely differ in terms of referent (national security), which in turn often trumps sustainability. President Obama occasionally presents a more positive notion of energy security with a clear emphasis on cooperation over competition with other states. He notes the importance of ‘international cooperation’ to deal with energy where possible, and the possibility of pooling ‘our scientific and technical knowledge’ to improve global energy situation (Obama 2009e: at G20). Clean energy cooperation is also mentioned as key for the future in numerous speeches abroad, including in Columbia, Chile, India, China and Brazil. This has also led to the creation of the Clean Energy Ministerial advancing cooperation on ‘climate friendly technologies’

(White House 2012: 11). It is interesting to note that Obama presents a more positive notion of energy security in speeches with an international audience. While the key actor here will always remain the American state, the emphasis on cooperation and interdependence over autonomy and independence is important, though marginalised. It does suggest some openness to alternative actors and voices, which is essential for change. Likewise, increasing openness to multilateralism is also key.

Beyond recognising the need for cooperation and a role for other actors in providing energy security, there are also some elements of non-exclusive referents, with attempts to secure beyond the state in less exclusive terms. Rather than securing the US against outside threats, the need to act together with other states is emphasised. At the Copenhagen climate summit, Obama noted the need for a clean energy economy, stating that ‘we will all be stronger, all be safer, all be more secure if we act together’ (Obama 2009l). In these constructions there is emphasis on sharing ‘new technologies with countries around the world’ and a recognition of the need to ‘address this threat in a cooperative effort with the entire world’ (Obama 2009k: at United Nations). They also involve recognition of climate security and the need to ‘preserve our planet’ – ‘[t]ogether, we must work to transform the energy that powers our economies, and support others as they move down that path...[t]hat is what our commitment to the next generation demands’ (Obama 2011g). Even domestically, in a speech on energy independence, Obama has noted the need to ‘meet the challenge at this crossroad of history by choosing a future that is safer for our country, prosperous for our planet, and sustainable’ (Obama 2009a). In these constructions, sustainability is equally important as economic security and ‘there is no contradiction between environmentally sustainable growth and robust economic growth’ (Obama 2009i). The recognition of climate change is key, as impacting wider security - ‘climate change

poses a threat to our way of life... We're not going to be able to sustain this kind of fossil fuel use. This planet can't sustain it' (Obama 2010d). Referents here are often global, recognising interdependence and the need to work together to secure energy supplies more sustainably.

Lastly, these discourses tend to emphasise the need to safeguard human well-being and promote more sustainable energy supplies to preserve the planet for future generations. They emphasise sustainability and the need to move to clean energy as essential to avoid 'putting our children and our grandchildren at risk' (Obama 2011f). At times, pollution is referenced as a threat, requiring action as they 'threaten our health and the health of our planet' (Obama 2009h). Problematically, even the clean energy economy is a 'race' for the 21<sup>st</sup> century against 'competitors' (Obama 2009h). The need to reduce reliance on oil is linked to human well-being, noting that 'in an economy that relies so heavily on oil, rising prices at the pump affect everybody – workers, farmers, truck drivers, restaurant owners, students who are lucky enough to have a car' (Obama 2011c). Multiple referents are also key here; these discourses do not focus solely on securing the American state: 'our continued dependence on fossil fuels will jeopardize our national security. It will smother our planet. And it will continue to put our economy and our environment at risk' (Obama 2010e). This in turn evokes calls for working together 'to address this threat in a cooperative effort with the entire world' (Obama 2009k).

Unfortunately, state discourses usually retain a focus on energy independence, emphasising clean energy largely as a way to reduce dependence on others, and more positive conceptions of energy security remain marginalised, rarely filtering through to policy in any significant way. Overall, sustainability remains in the background, rarely

featuring in energy security discussions in any significant way. When used, the notion of sustainability suggests a broader, longer-term vision of security for the future of the ‘planet’ rather than just the autonomy of the United States. While there is little recognition of non-state actors, the emphasis on cooperation and the need for multilateral action does open up the discussion and referent of energy security. These more positive notions have had some policy impacts too – particularly through bilateral and multilateral energy technology-sharing and cooperation initiatives involving the Department of Energy, the Environmental Protection Agency and the State Department, though discussions of these are often divorced from discussions of energy security. Interestingly, there is more action within the United States, with an increasing number of states introducing stronger environmental regulation.

#### **6.2.1.2 China**

Chinese state discourses on energy security often have a heavy emphasis on the need for multilateralism, but there is little openness to alternative discourses in state understandings of energy security. However, the overall energy system in China is heavily influenced by key partially state-owned energy companies, which in practice have a quite a lot of independence in their operations. While there are many voices discussing energy security, censorship plays a key role limiting critique of the official line with most media sources largely reifying the official line.

Interestingly, while the state remains the focus as referent object to be secured in energy terms, two other referent objects are also present in these discourses – global energy security is frequently promoted, and energy is also occasionally linked with human

survival. Energy is also presented as closely linked with social and economic development and with environmental stability. As noted in chapter five, Chinese state discourses increasingly rely on notions of global or common energy security, with President Hu suggesting a need to ‘step up worldwide energy dialogue and cooperation, jointly maintain energy security and energy market stability’ in a speech at the United Nations (Hu 2005b). Hu has also noted the need for ‘global energy security’ to ensure ‘the economic growth and people's livelihood of all countries and to maintaining peace and stability and promoting common development’ (PRC Foreign Ministry 2006). Prime minister Wen Jiabao has also emphasised the role of energy security in ‘the national economy and the people's livelihood’, suggesting a need for ‘new concept of mutually beneficial cooperation, diversified forms of development and common energy security through coordination’ (PRC Foreign Ministry 2012b)<sup>6</sup>. Likewise, a 2011 white paper on development lists energy as a ‘common security issue’ that states need to cooperate on, as it has ‘a major impact on human survival and sustainable economic and social development’ (PRC Central Government 2011: section IV). The global nature of energy security is particularly emphasised with both increasing marketisation of energy within China and with increasing reliance on imports, as China becomes more vulnerable to unstable international energy markets.

The importance of energy for social and economic development is emphasised continually, (PRC Foreign Ministry 2012a) – but often used to justify continued environmental destruction. Likewise, China's energy development is said to be a positive contribution to meeting development needs both within and outside of China (PRC NDRC 2007b). The emphasis on social and economic development tends to precede any environmental

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<sup>6</sup> It is worth noting also a counter discourse suggesting that China contributes to world energy security by being self-sufficient (Ma 2007).



concerns, however, with claims that targets set in the 11<sup>th</sup> Five Year Plan (2006-2010) would result in the achievement of ‘coordinated development...between energy production, the economy, the society and the environment’ (PRC NDRC 2007a: 13). Discourses on ecology are seeping into the official stance, with increasing recognition of the environmental costs of rising energy demand: ‘China’s coal-dominated energy structure is not conducive to environmental protection’ (Zeng, in PRC NDRC 2005). Likewise, at the United Nations China has emphasised efforts made to speed up ‘the building of a resources-conserving and environment-friendly society’, announcing binding targets both for increasing non-fossil fuels as a part of total consumption and decreasing CO<sub>2</sub> emissions (PRC Central Government 2012a). It also announced a willingness ‘to establish a long-term energy cooperation mechanism and make its due contribution to ensuring global energy security and tackling climate change’ (PRC Central Government 2012a). Emphasis on sustainable development continued in China’s 2012 white paper on energy (PRC Central Government 2012b: preface).

With increasing recognition of multiple referents and the need for sustainable development, there is increasing hope for more positive outcomes. The environmental discourse has evolved a lot, most likely because of the growing number of public protests over environmental issues threatening to undermine political stability. Clear targets on efficiency, consumption and emissions are a small step on the way. A key official suggested the need to ‘seek an energy-efficient and environmentally-friendly path for economic growth was a "pressing" task for the country, and also imposed a tougher requirement for the energy sector’ (Xinhua 2010c). Overall, China is becoming more open to cooperation over clean energy ‘as part of the overall effort to ensure sustainable development of human society’ (PRC Foreign Ministry 2006). However, sustainability is

often used as a catch-phrase to describe China's current energy development, which is clearly not sustainable in practice, so it is difficult to see how far this represents any actual change. Nevertheless, open recognition that 'that climate change is interrelated with energy and should be addressed in integrated manner' represents a clear change in discourse, if not necessarily reflected in policy (FMPRC 2008; see also PRC NDRC 2007a). This is becoming increasingly frequent, with the NDRC noting that 'the development and use of energy, is one of the main causes of ecological destruction and environmental pollution' (PRC NDRC 2007b), and developing clean energy seen as essential to 'adjust our energy structure, cope with global climate change, and ensure energy security' (Xinhua 2010d). Likewise, the 2012 white paper notes the need for energy reform for China to move towards 'a comprehensive, balanced and sustainable development of its energy, economy, society and eco-environment' (PRC Central Government 2012b: part I). This is a key feature in the 2012 white paper, with sustainability noted as an 'important strategic task', including reducing consumption and pollution to provide 'economical, clean and secure development' (PRC Central Government 2012b: part II)<sup>7</sup>.

These changes have had some policy impact, with increasing investment in renewable technologies and more openness to energy cooperation and dialogue with other states. This has included the development of a solar-powered town in Turpan basin, and low-carbon emission pilot towns (Xinhua 2010d). In terms of cooperation, China has announced infrastructural projects 'in clean energy and environmental protection in other developing countries' (Hu 2011b). It has enhanced cooperation and participation in multilateral and

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<sup>7</sup> The 2012 white paper goes as far as saying that the state encourages fostering the concept of environment-friendly and low-carbon development, coordinates the development and use of energy resources with the protection of the eco-environment while paying equal attention to both, and actively fosters an energy development pattern that meets the requirements of ecological civilization' (PRC Central Government 2012b: part II).

bilateral dialogues to help ‘to improve international framework of energy security’ (PRC Central Government 2006a), though cooperation often focuses on stabilising prices or ensuring continued fossil fuel supplies. Cooperation with the US, meanwhile, has expanded immensely through a number of bilateral initiatives, particularly on clean energy technologies<sup>8</sup>. Overall, it is clear that cooperation is more prevalent on issues less likely to be constructed as national security – particularly clean energy technology, efficiency, and also climate change. In discussions on energy cooperation, energy security tends to be phrased largely in these terms.

Overall, while the voices and actors constructing energy security in both states remain limited, there is some reliance on less exclusive referents framing energy as a global or common security issue, as well as emphasis on human survival, development and environmental protection. There is also more openness to cooperation, particularly over issues framed in environmental or climate terms rather than as national security. However, there is more emphasis on cooperation in international speeches. While sustainability is often emphasised, it has so far had little policy impact, but there does seem to be a move towards more positive notions of energy security at least in rhetoric. This is largely a more recent development in both states, gradually emerging from 2007-8 onwards. However, the energy system remains fairly closed, with little openness for non-state actors to influence policy.

### ***6.2.2 Non-state discourses***

This section looks at what individuals and communities are saying and doing in the name of energy security in the United States and China. The focus here is largely on non-

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<sup>8</sup> This has included the establishment of a joint ‘clean energy research center and joint ventures in wind power, smart grids and cleaner coal’ (Obama and Hu 2011).

governmental organisations (NGOs) and pressure groups working to influence policy on energy and the environment. The discussion here can only cover a limited number of groups and voices, but is largely used to illustrate the existence of alternative, non-state positive notions of energy security in the discursive space which have been ignored in previous analyses of energy security.

### 6.2.2.1 United States

In the US, the most active non-state voices articulating alternative notions of energy security are environmental pressure groups<sup>9</sup>. This is likely because their starting point is environmental or climate security, which, compared with energy, is not as closely linked with national security (Trombetta 2008)<sup>10</sup>. There's a wide range of groups advocating for a more positive energy policy, from the more well-known like Greenpeace USA and Friends of the Earth, to smaller, lesser known organisations such as Restoring Eden, a Christian Group advocating environmental stewardship. This section starts by looking at how some of these groups use the language of security, including how they draw on legitimating language. It then looks at the range of actors, both in terms of the multiplicity of voices and of actors involved. It illustrates a reliance on inclusive or multiple referents in need of protection, and an emphasis on the possibility for positive change in energy policy based on a broader understanding of security. Lastly, it discusses the values promoted in these representations.

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<sup>9</sup> It's more difficult to identify non-state discourses in authoritarian regimes. In this sense, the United States is a particularly good case study as it has a very active civil society, though it may make generalisations more difficult.

<sup>10</sup> It is important to note that environmental security is also contested (for a fuller discussion, see Floyd 2007: 340-2; Floyd and Matthew 2013). Here, I occasionally use the term environmental security as shorthand to refer to the need for a stable and secure climate and environment, needed for human survival and well-being.

Many of these groups draw on the language of security, using similar security references to the official discourse. In particular, there is often an emphasis on urgency and the need for action, but in these cases, the threats are to inclusive referents. For example, Greenpeace USA have produced an alternative policy agenda for US energy security, titled ‘the energy [r]evolution’. The first edition was produced in 2007, and claimed that

time is running out...the global climate is changing and that this change is caused in large part by human activities; if left unchecked, it will have disastrous consequences for Earth’s ecosystems and societies (Greenpeace USA 2007)

It asked for ‘a national plan to address global warming’, which would have broader security implications, as it would ‘create jobs, improve the security of America’s energy supply, and protect Americans from volatile energy prices’ (Greenpeace USA 2007). Meanwhile, current energy policy and accompanying course towards global warming is said to mean ‘catastrophic consequences for the natural environment, the global economy, and human society as a whole...[w]e have the opportunity now to change that course, but the window is narrow and closing quickly’ (Greenpeace USA 2007). This is a time for action and a case of survival: ‘we cannot survive without an energy revolution’ (Greenpeace USA 2010b). Likewise, for Friends of the Earth, ‘the climate crisis is the definitive challenge of our time, and our reliance on fossil fuels is driving it’ (2013b). Occasionally, these groups do fall back on negative security representations, using legitimating language to call for action. The mission statement of ACORE, for example, states that it is ‘dedicated to building a secure and prosperous America with clean, renewable energy’ (ACORE 2013).

The range of actors, both in terms of voices calling for action (securitising actors, using the Copenhagen School terminology), as well as agents (securers), involved in reproducing positive energy security in itself allows for a reorientation of power. The number of voices

involved in calling for action is staggering, with the biggest climate demonstration ever taking place in Washington DC on February 17<sup>th</sup> 2013. Around 50,000 people demonstrated calling for a change in energy policy to stop global warming, including members of 168 different advocacy groups (Sierra Club 2013b). This was also accompanied by an online petition signed by over one million activists (Sierra Club 2013b). On a smaller scale, Greenpeace USA collates stories from individuals calling for a change in policy in their ‘quit coal’ campaign (Greenpeace USA 2013c). Greenpeace have even used the term ‘positive energy policy’ to call for action: ‘[I]luckily enough, Greenpeace is itself only part of a much larger movement towards positive energy policy’ (Greenpeace USA 2013b). In terms of action, the Sierra Club note the role of ‘grassroots pressure’ in pushing for change towards clean energy, ‘across the U.S., cities, counties, and states are moving forward with clean-energy programs that save lives, create jobs, and keep our air and water clean’ (Sierra Club 2013a)<sup>11</sup>.

Numerous campaigns by Greenpeace and Friends of the Earth in particular have pushed energy policy towards renewables, including campaigns resulting in the shut-down of dangerous nuclear reactors that failed safety testing, exposing corruption in one of the Keystone XL reviews leading to further investigation, ending polluter subsidies and much more work and campaigns exposing human and environmental damage resulting from fossil fuel production and consumption (Friends of the Earth 2013a). Greenpeace continues to campaign to shut down coal plants in their Quit Coal campaign and for legislation to curb global warming (Greenpeace USA 2013a; see also Sierra Club 2013a; Hip Hop Caucus 2013). The link between energy and climate security is continually

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<sup>11</sup> Here, the focus is on the United States, but the Sierra Club also help ‘communities in other countries who want to stop the destructive practices of the coal industry and move toward a clean energy future. Globally, the coal industry disproportionately harms the poorest and most vulnerable people, while doing little to reduce energy poverty’ (Sierra Club 2013a).

recognised, together with the need for multilateral cooperation: ‘[a] change in energy policy has to be connected to a change of climate policy. The United Nations (UNFCCC) climate talks therefore still remain central to the survival of our planet and a global regime for CO<sub>2</sub>’ (Greenpeace USA 2010b). There is a need to reconsider energy security, which needs to involve ‘all branches of government, including states and local jurisdictions, the public and private sectors, international partners, and individual citizens’ (CSIS and WRI 2009b). This also needs to involve working ‘cooperatively with the global community to address energy security and climate change’ (CSIS and WRI 2009b). The number of actors and voices involved in rearticulating energy security is empowering in itself, particularly as a number of these campaigns have produced clear policy change. They also help to reorient discussions over energy security towards securing people and planet sustainably.

The vast majority of these alternative notions of energy security vitally do not rely on exclusive referents, showing a clear contrast to dominant discourses by avoiding casting security in us/them, friend/foe terms. The referents they use vary from globally inclusive such as common security, or in some cases multiple, overlapping referents which are not organised in hierarchies. Most often, the emphasis is on protecting the environment and ecosystems both in their own right and in order to preserve the planet for continued human life. Sustainability is a key value promoted here. The World Resources Institute’s slogan is ‘working at the intersection of environment and human needs’ (WRI 2013b). Greenpeace emphasises the need to change energy policy to avoid ‘disastrous consequences for Earth’s ecosystems and societies’ (Greenpeace USA 2007: 4). The Natural Resources Defense Council (NRDC) state that their purpose is

to safeguard the Earth: its people, its plants and animals and the natural systems on which all life depends...NRDC affirms the integral place of human beings in the environment (NRDC 2013a).

The security of human beings and the environment is often put above national or economic security concerns. On fracking, the Sierra Club state that ‘if drillers can’t extract natural gas without destroying landscapes and endangering the health of families, then we should not drill for natural gas’ (Sierra Club 2012). Likewise, Greenpeace emphasises the impacts of current energy policy on health: ‘Every day, millions of people whose stories you won’t hear are suffering the direct effects of our addiction to fossil fuels. Asthma, cancer, mutilated ecosystems, devastated communities’ (Greenpeace USA 2010b: 4).

The conflict between current US energy security policy and climate security is often noted, with NRDC suggesting that the US is at ‘an energy crossroads’, with a choice between ‘a more sustainable energy future’ and developing ‘ever-dirtier sources of transportation fuel derived from fossil fuels – at an even greater cost to our health and environment’ (NRDC 2013b). The need to address energy security and climate security together is highlighted by a report produced by the Center for Strategic and International Studies and the World Resources Institute, who suggest that ‘the hard truth is that the United States--and the world--must now figure out how to achieve energy security *and* protect Earth’s climate’ (CSIS and WRI 2009a), emphasis added. Similarly, Greenpeace’s third energy [r]evolution report looks in practical terms at ‘how to develop a sustainable energy and climate policy’ (Greenpeace USA 2010b: 6). Changing our approach to energy security is vital, ‘for the sake of a sound environment, political stability, and thriving economies, now is the time to commit to a truly secure and sustainable energy future - a future built on clean technologies, economic development, millions of new jobs, and a liveable environment’ (Greenpeace USA 2007: 5).



Alternative representations of energy security that are based on inclusive referents and multiple actors and voices are more likely to produce security in themselves, by empowering actors to reproduce notions of energy security that do not rely on a traditional logic of national security emphasising competition to secure autonomy in terms of fossil fuel supplies. They reproduce positive energy security in both discourse and practice. While these groups ostensibly have no power to make policy they can and do put pressure on the government to change course. Dominant, negative energy security discourse and policy reproduce environmental and human insecurity, so energy security discourses which account for these are also more likely to produce outcomes where the security of individuals and the environment is not neglected in favour of the security of supplies to the state.

Beyond reproducing positive constructions of energy security, these alternative practices call for policy change, including producing reports outlining alternative policy solutions which recognise the need for ‘the world’s nations, businesses and citizens...to fundamentally rethink current energy policies, practices and actions’, as ‘[the] fossil fuel-based growth trajectory of the last century is no longer sustainable or economically viable’ (WRI 2013a). Greenpeace’s energy [r]evolution reports provide a blueprint for solving global warming. They reject fossil fuels, arguing that ‘renewable energy technologies can deliver the energy we need ...but only with consistent support based on an understanding that solving global warming is our top energy priority’ (Greenpeace USA 2007: 7), as opposed to maximising fossil fuel production in the name of energy independence. They advocate ‘a change in the way that energy is produced, distributed, and consumed’, based on renewables, sustainability, ‘decoupling economic growth from the consumption of fossil fuels’, ‘respecting the natural limits of the environment’ and ‘creating greater equity

in the use of resources’ (Greenpeace USA 2007: 8; also Greenpeace USA 2010a). The NDRC rejects the exploitation of harder to reach, more expensive fossil fuels, ‘including tar sands, oil shale and coal’, stating that

moving down this road has enormous consequences for the air we breathe, the water we drink, our climate, our wildlands and wildlife. NRDC is actively working to fight the infrastructure that would support increased production and use of these fuels (NRDC 2013b).

Other campaigns providing policy solutions for moving towards a more positive and sustainable energy security policy include the ‘Greenscissors’ coalition, campaigning to cut environmentally harmful federal spending, including fossil fuel subsidies (Greenscissors 2012). Likewise, Friends of the Earth’s ‘Earth Budget’ campaign emphasises ‘prioritizing people, not polluters’ and the need to solve the budget deficit ‘without harming the public and the environment’ (Friends of the Earth 2013d).

Visions for positive energy security are articulated in a number of venues, including the following description of ‘a secure, low-carbon energy system’, where

Energy is produced, delivered, and consumed without releasing harmful greenhouse gases into the atmosphere. Society has adequate, affordable, and reliable energy to sustain improved standards of living. Communities are unaffected by global climate change because of successful efforts to mitigate emissions and adapt to unavoidable impacts. New technologies and fuel sources provide the basis for economic opportunity. The diversity of energy sources and suppliers alleviates the geopolitical tensions associated with competition for fossil fuel resources today (CSIS and WRI 2009b: 14).

The impact of such a change on geopolitical tension is also important, as competition would become unnecessary, enabling cooperative energy security practices to ‘to address energy security and climate change’ efforts jointly (CSIS and WRI 2009b: 5). Producing alternative energy policy reports and budget solutions is an essential part of rethinking energy security towards longer term solutions that do not produce insecurity for people or the planet they depend on to survive.

The key values promoted in positive energy security discussions are justice, equality and sustainability. Friends of the Earth aims to defend ‘the environment and champions a healthy and just world’ (Friends of the Earth 2013c). They explicitly advocate sustainability, ‘[b]ecause the environment belongs to all of us (and we to it), we must ensure that natural resources are used in a fair way so that all people can lead healthy, fulfilling lives, and breathe clean air, drink clean water and enjoy a stable climate’ (Friends of the Earth 2013c). They emphasise a link between ‘the fight to safeguarding the planet and its resources’ and ‘the global struggle for social and economic justice’<sup>12</sup> (Friends of the Earth 2013c). The NRDC aim to ‘safeguard the Earth: its people, its plants and animals and the natural systems on which all life depends’, and they ‘seek to establish sustainability and good stewardship of the Earth as central ethical imperatives of human society’ (NRDC 2013a). The need for bottom-up action is emphasised by Greenpeace, who conclude that ‘[w]e cannot survive without an energy revolution. The keys to our future have been in the wrong hands for too long, and it will take all our strength to take them back. I hope you will join us’ (Greenpeace USA 2010b).

### 6.2.2.2 China

Overall, China has a less active civil society than the United States. However, the number of non-state advocacy groups is growing, particularly in the environmental sphere, as rapid economic growth in recent years has put increasing pressure on the environment. The relationship between the state and civil society is also very different compared with the United States<sup>13</sup>. Officially, Non-Governmental Organisations (NGOs) have to be registered with the state to operate legally, but as there are limits on numbers of NGOs allowed per

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<sup>12</sup> In the process, they emphasise ‘working towards ensuring that in our struggle for a healthy and just world our words and actions uphold the rights and dignity of all peoples’ (Friends of the Earth 2013c)

<sup>13</sup> For an in-depth discussion of this, see Yang (2005).

issue area, some environmental groups are registered as non-profit enterprises, some as student associations (which are less heavily regulated), and some groups remain unregistered (which is technically illegal), but still manage to operate publicly (Yang 2005: 55). While the monitoring system suggests these groups have little independence from the state, they still manage to operate and campaign quite successfully. Often, the Chinese state's own discourse is used 'as a weapon of protest, resistance and collective action' – for example, environmental groups draw on the state's official policy of sustainable development to promote 'an environmental discourse of democratic values and citizen participation' (Yang 2005: 52). Many groups have strong international ties, originating as splinter groups of global environmental advocacy groups. This section will start by looking at how these groups use the language of security, before illustrating the reliance on multiple actors and voices, opening up the meaning of energy security and empowering non-state actors, the reliance on non-exclusive referents more likely to produce security when it comes to energy policy, the emphasis on positive longer-term outcomes and advocacy for change in policy, and the values promoted in these discourses.

The language of security is often used by these groups, particularly by Greenpeace China.

However, they promote a very different notion of security to traditional, national security.

For example, 'true energy security' is said to start with climate change:

If we are to address climate change, one of the principles must be equity and fairness, so that the benefits of energy services - such as light, heat, power and transport - are available for all: north and south, rich and poor. Only in this way can we create true energy security, as well as the conditions for genuine human security (Greenpeace China 2007: 15).

The emphasis on equity and fairness will be discussed in more detail later, but presents a clear rejection of zero-sum thinking. Likewise, the link between energy and human security is important, providing a clear precedent for rethinking the referent of energy security towards securing human beings rather than citizens and state borders. Energy

security is seen as intimately linked with ‘environmental protection’ (Greenpeace China 2010a: preface). Coal is highlighted as a key problem, contributing to climate change, portrayed as ‘the greatest threat to mankind’ (Greenpeace China 2013b). The number of coal mine accidents is also cited as a ‘direct security threat’ (Greenpeace China 2013b).

Multiple non-state actors are contesting official energy policy in China, emphasising environmental protection and sustainability, often working with the government to produce change. The number of environmental protests is rapidly increasing, rising by 120% from 2010 to 2011 (Duggan 2013). Likewise, ‘over 300,000 petitions were received on environmental matters during the 11<sup>th</sup> Five Year Plan [2006-2010]’ (Feng and Wang 2012). The nature of contestation has also changed – while protests used to focus on demanding compensation, they now make ‘broader demands for environmental protection’ (Feng and Wang 2012). They are often tolerated by the government, and are ‘sometimes successful in their goals’ (Duggan 2013). Moreover, while the government has traditionally attempted to close down contestation and protest, when it comes to environmental protection the government is increasingly working *with* NGOs (Feng and Wang 2012). There is a large and growing number of groups involved in contesting official notions of energy security, and many work with government and local communities, as well as academic institutions and research institutes. Greenpeace have produced surveys and undertaken field visits, taking part in community discussions about local environmental problems related to energy policy choices, particularly coal production and consumption, effectively promoting change to national energy policy (Greenpeace China 2013b). Ecolinx provide environmental education ‘in partnership with government, academic institutions and NGOs’ to raise awareness of the link between climate change and energy, to encourage sustainability and energy conservation (Ecolinx 2013). The

Energy Foundation China likewise work with top energy policy decision-makers and experts to fund and develop best practice policies that shift ‘investment into modern, energy efficiency and renewable energy technologies’, producing policy changes at local and central levels (Energy Foundation China 2013a). The Global Environmental Institute works with government and civil society to ‘design, implement, and enforce socially and ecologically-sound development’ in China (Global Environmental Institute 2013a).

Greenpeace emphasise the need for public participation, and worked with the government on the Renewable Energy Law produced in 2006 (Greenpeace China 2013c). They also lobby to ensure government action in international climate negotiations, to ‘move away from coal and to invest heavily in renewable energy and energy efficiency’ and for the public to ‘take personal action’ supporting the government in these areas, and work with Chinese academics ‘to publish research and policy recommendations’ to back up demands for action (Greenpeace China 2013f). The International Fund for China’s Environment (IFCE) works with the Chinese government, businesses and NGOs, also providing ‘environmental education programs to improve Chinese peoples’ agency in the environmental movement’ (IFCE 2013). NRDC China works with the Chinese government to ‘develop policy solutions that can help China to develop sustainably and curb greenhouse gas emissions’ (NRDC China 2013)<sup>14</sup>. The number of NGOs and other groups involved illustrates the increasingly contested nature and meaning of energy security in China. The growing space for individuals and groups to contest and rearticulate energy security emphasising values like sustainability and environmental protection works to empower actors to both speak and practice energy security differently. The government’s emphasis on economic development is increasingly questioned, with a 2013

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<sup>14</sup> They focus ‘on the intersection between climate and energy, and work to promote policies that can scale up clean energy resources like energy efficiency and renewable energy’ (NRDC China 2013).

survey finding that ‘nearly 80 per cent of Chinese residents believe that environmental protection should be a higher priority than economic development’ (China Daily 2013)<sup>15</sup>.

Throughout these discourses, there is also a reliance on non-exclusive referents, securing people and the environment which they depend on to survive. There is a recognition that economic development cannot be done at the expense of the environment (Greenpeace China 2013b). When energy is linked with the global climate, the subject of security moves from states to people and ecosystems:

Every day we damage our climate by using fossil fuels (oil, coal and gas) for energy and transport. As a result, climate change is already impacting on our lives, and is expected to destroy the livelihoods of many people in the developing world, as well as ecosystems and species, in the coming decades (Greenpeace China 2007: 10)

The impact of coal use on human health and the environment is emphasised (Greenpeace China 2010b). It is said to be causing ‘grave environmental damage’ and ‘threats to people’s health’ and without change in energy policy away from fossil fuels, China ‘will be unable to solve the grave problem of air pollution’ (Greenpeace China 2010b)<sup>16</sup>. Consequently, ‘China urgently needs to pursue a low-carbon sustainable development model’ (Greenpeace China 2010b). Greenpeace calls for China to ‘phase out dirty, unsustainable energy...emissions pose a real and present danger to both ecosystems and people’ (Greenpeace China 2007: 15). Ultimately, change towards a sustainable energy model is necessary to secure ‘the climate, environment and our health’ (Greenpeace China 2013d)<sup>17</sup>. Continued and increased CO<sub>2</sub> emissions from fossil energy is said to ‘impair the integrity of global ecosystems’ (Energy Foundation China 2013c). JUCCCE emphasises the cross-border nature of environmental issues, which makes it difficult to secure in

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<sup>15</sup> This survey was carried out by the Public Opinion Research Center in Shanghai Jiao Tong University in March and April 2013, with 3,400 residents in 34 Chinese cities.

<sup>16</sup> Reliance on coal in particular is emphasised as posing ‘a significant threat to public health, causing an estimated 500,000 premature deaths in 2008’ (Greenpeace China 2010b).

<sup>17</sup> Similarly, the Global Environmental Institute promote ‘development that is economically, ecologically, and socially sustainable’ (Global Environmental Institute 2013a).

traditional, national security terms: '[u]nfortunately, China's growing pollution doesn't stop at its borders' (JUCCCE 2013). Often, there is less separation between humans and the environment, with groups like WWF aiming to 'stop the deterioration of the Earth's natural environment and to create a better future for humanity in harmony with nature' (WWF China 2013). The emphasis on inclusive or multiple referents represents a rejection of zero-sum thinking and spatial exclusion, which in turn presents very different energy policy options and solutions to dominant energy security constructions.

Like in the US, Chinese non-state actors produce reports outlining alternative policy solutions. This includes Greenpeace China, who produced an alternative policy outline emphasising the need to 'phase out dirty, unsustainable energy' (Greenpeace China 2007: 15), as well as a number of other policy-focused reports outlining alternative policy solutions based on principles of sustainability and environmental protection (Greenpeace China 2013c). They argue that 'solutions to climate change and energy crises already exist: clean, renewable energy, energy efficiency and an end to deforestation' (Greenpeace China 2013a). As part of their campaigns, Greenpeace continue to raise awareness of the link between energy and climate change by witnessing and documenting the impacts and link between the two, including ecosystem change and fossil energy pollution and using this to advocate change' (Greenpeace China 2013e). Many of the programmes produced by Chinese non-state actors are practical and policy-focused, producing clear change in policy. NRDC have also worked with the government to help improve the implementation of China's Renewable Energy Law, strengthened cooperation with US on climate and clean energy and advanced energy technology development (NRDC China 2013).



JUCCCE is ‘dedicated to transforming the way China creates and uses energy’, as ‘a green China is critical for a healthy world’ (JUCCCE 2013). As part of this, they undertake projects in a number of areas ‘such as Smart Grid, ecocities, green finance, and sustainable consumption’, working with government officials, universities, the private sector and NGOs’ (JUCCCE 2013). The Energy Foundation, meanwhile, provides clear policy initiatives by funding research to develop policy recommendations, which are then forwarded ‘through decision-making channels, for consideration’ (Energy Foundation China 2013a). If approved by the government, they then produce pilot programmes in different provinces to demonstrate success of policy, then propose national adoption (Energy Foundation China 2013a). Their CESP programme has a \$29 million/year budget, funding projects ‘with the greatest carbon dioxide reduction benefits’ (Energy Foundation China 2013b). IFCE ‘has developed a range of influential programs facilitating partnerships and building capacity in China’s environmental movement’ (IFCE 2013)<sup>18</sup>. This even involves enhancing cooperation with other states. GEI currently work on enhancing US-China cooperation on ‘low-carbon planning and energy efficiency’, and have in the past worked on the US-China bilateral dialogue on these issues (Global Environmental Institute 2013b). Overall, energy policy solutions change when energy security is framed around the security of human beings and the need for environmental protection. Rather than reinforcing artificial state borders and securing these through increased exploitation of fossil fuels, the emphasis is on sustainable solutions to secure human beings.

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<sup>18</sup> In the process, they have worked ‘with NGOs to improve their capacity, with companies to enhance China’s access to green technology, with policy makers to influence China’s environmental policy, and with environmental education programs to improve Chinese peoples’ agency in the environmental movement’ (IFCE 2013).

The values promoted by these groups, through discourse and policy initiatives and practices, include justice and equity as well as sustainability. The Global Environmental Institute emphasise a vision of ‘a diverse and healthy world shaped and shared by all, in which economic well-being is directly linked to ecological and social well-being’ (Global Environmental Institute 2013a). Energy security as understood by these groups is not zero-sum: ‘[w]hat makes China sustainable can help make the world sustainable. And that’s good for all of us’ (JUCCCE 2013). There is a focus on ‘equity and fairness’ as a key principle for ‘energy security, as well as the conditions for genuine human security’ (Greenpeace China 2007: 15). The limits of nature and resources is used to justify the need for ‘a fair distribution of benefits and costs within societies, between nations and between present and future generations’ (Greenpeace China 2007: 15). The need for sustainability is key, as China cannot have economic development at the expense of the environment (Greenpeace China 2013b). IFCE aim to ‘contribute to an increasing global awareness of the interrelations between environmental problems and human well-being’ (IFCE 2013). Overall, the emphasis on these values helps to contest and reconstruct official notions of energy security towards a more inclusive, fair and sustainable energy security.

### **6.3 What does positive energy security look like?**

The alternative constructions analysed here represent a rather different kind of energy security to dominant constructions. They present an inclusive notion of energy security that does not rely on spatial exclusion and binary identities. It emphasises the need to secure beyond the state, reframing security away from national security and towards securing human beings and ecosystems, both in their own right and for human needs. Sustainability is a key principle behind these notions of energy security, emphasising the need for humans to coexist with nature in a way that does not compromise the social,

economic and environmental needs of future generations. The very existence of these alternative discourses and campaigns is also empowering, opening up the meaning of energy security beyond dominant discourses. Overall, they illustrate the constructed and contested nature of energy and security. Dominant energy security discourses in the United States and China are closely linked with a negative conception of national security which is both disempowering and reproduces insecurity for states, human beings and the environment. If ‘the primary subject of security is people – not states, nor elites, nor the affluent, nor the stronger’ (Walker 1988: 128), these discourses fundamentally fail to provide security in any meaningful way. However, the alternative discourses surveyed here illustrate the potential for thinking, speaking and practicing energy security differently.

As constructed in these discourses, energy security is not exclusive – it does not need to focus on securing the state against threatening others. By focusing on securing human beings, societies, communities, ecosystems and the global climate, energy security becomes inclusive and more positive. They highlight that security does not have to be based on spatial exclusion. It can take a range of more inclusive forms, emphasising global or common security, or multiple, overlapping referents which do not stand in a binary relationship with each other, rather than a delineation between an ‘us’, to be protected, and ‘other’, as threat. Thus, positive energy security here does not involve securing one referent against an ‘other’. Following this, it can have multiple referents, including individual human beings who need energy supplies to continue life as they know it, the global and local ecosystem/s which are threatened by traditional energy security practices, and perhaps even states. Most importantly, it highlights that others do not have to be ‘other’ – ‘they may be different – but not cast as exclusion and inferiority’ (Walker 1988: 166). Moving beyond exclusive notions of security helps to produce discourses which

secure people beyond the state, rather than reproducing negative notions of national security. In policy terms, this means local, national, regional and global state and non-state groups working together to secure energy supplies for human beings in a sustainable way that ensures the survival of a stable climate and ecosystem.

In terms of values, these discourses move beyond national security/autonomy, to emphasise cooperation, sustainability and equality. Energy security is not constructed as a zero-sum issue requiring competition to maximise national power and autonomy. The limited and finite nature of energy resources is highlighted, but as a shared resource requiring sustainable extraction, rather than something to be traded between geographically-bound states for economic or strategic gain. Sustainability and cooperation are key here, with discourses emphasising the need to work together to share and develop cleaner energy technology and resources. Justice and equality are emphasised together with the need for a fairer distribution of resources. The values underlying these discourses ultimately emphasise the need to secure people rather than states, and to ensure the future survival of the planet both on its own and for future generations. Sustainability, justice and cooperation are essential to secure human beings now and in coming years.

Lastly, these discourses are also empowering. They open up the meaning of energy security, as well as enabling a wider range of voices and agents to speak and act on energy security. Security theory and practice tends to limit discussions of agents or speakers of security to the state. While discussions have become increasingly open to questioning the referent or subject of security, the agent/speaker of security remains limited to the state, and the academic literature has been complicit in this – including securitisation theory, which presents a passive audience which accepts or rejects securitisation (Hoogensen

Gjørsv 2012: 839)<sup>19</sup>. These alternative, more positive energy security discourses clearly illustrate that the state is not the only speaker or agent of security. This does not necessitate dismissing states completely – only the particular notion of national security which has become dominant. The state can still be an actor and can and should itself also pursue positive energy security. It can be a useful organising tool<sup>20</sup>. However, while the state can and should be a positive energy security actor, it needs to be one actor and speaker among many rather than the only actor. Positive security policy should not produce insecurity, which necessitates wider and more active referents as well as other actors alongside the state. If security is about people being secure, those people need to be empowered to speak and act security. A positive energy security secures human beings, creating the conditions for them to emancipate themselves, rather than imposing emancipation from above.

As noted by Naomi Head, there is a relationship between communicative processes and legitimacy, which is relevant here. Ultimately, there is a need for ‘fair and reflective procedures’ that include a larger number of actors and discourses to develop legitimate policy (Head 2012: 197). Thus, positive energy security needs to be multi-actor (Hoogensen Gjørsv 2012). In this sense, positive security is ‘a process of freeing up space for dialogue and deliberation – the diffusion of power to “speak” security’ (McDonald 2007: 2). Moreover, to avoid presenting a totalising metanarrative or a theory that becomes reified and loses any critical edge, it is necessary to conceive of positive security as ‘a process rather than an endpoint’ (Wyn Jones 1999: 78). As such it can be a reflexive notion of progress that develops conceptually. Thus, it is vital to stop seeing security itself

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<sup>19</sup> Interestingly, positive security as understood here shares many things with the Copenhagen School’s understanding of desecuritisation as a sphere of democratic debate. However, the Copenhagen School do not see such ‘positive’ features as possible within the sphere of security.

<sup>20</sup> Germany’s Energiewende, or ‘energy transition’, presents an excellent example here. It is a national plan to transform energy supply and demand to reduce greenhouse gas emissions, increase renewables and improve energy efficiency (Rommeney 2013).

in binary terms as positive/negative, recognising the full spectrum and variation of security, and working instead towards more positive security.

The very existence of these alternative energy security discourses opens up the potential for changing thinking on energy security, by denaturalising conventional assumptions about what energy security is and who it is for. This highlights the limitations of the conventional energy security debate, discourse and practice. They illustrate that it is not only possible to re-think energy security, but that energy security is already being thought differently. It is vital to emphasise that there is no blueprint for how a positive energy security can be articulated, but rather that there are multiple notions of energy security, and that some of these are more positive than others, based on the assumption that energy security should provide security for human beings and the environment in which they live. Their consistent use of the language and grammar of security illustrate the contextual nature of the meaning and value of security – security means different things to different people in different times and spaces, and can be more positive or more negative, depending on how it is used. As understood in these discourses, security is not national autonomy or a stable free market, but stable ecosystems and secure human beings. It is concerned with sustainability and justice, and can and should be articulated, contested and practiced by agents beyond the state. In the end, ‘it is not necessary to reject the concept of security in order to think about peace and justice; just the particular understanding of security through which the concept has more or less been turned into its opposite’ (Walker 1988: 161). The role and responsibility of the analyst is key here, as emphasising contestation opens up security as a concept, rather than closing it off. Ultimately, recognising that security is contested rather than fixed provides potential for change.

## 6.4 Implications

What does this all mean for thinking, speaking and practicing energy security? Firstly, once the purpose of security is securing human beings and the environment, it becomes clear that dominant constructions of energy security are failing. Dominant energy security constructions in the United States and China continue to promote a negative notion of energy security as national security, which is making people, states and the environment less secure. However, there are a number of marginalised discourses contesting dominant notions of energy security, which rely on inclusive notions of security that secure human beings and the environment, emphasising sustainability and empowering non-state actors to speak and act security. These portray a very different, more positive, notion of security. To return to the central research questions of this thesis: how is energy security constructed in discourse and practice in the US and China? What does it mean to attach ‘security’ to energy; what is the value of (energy) security; and *should* security be attached to energy?

Firstly, energy security is constructed in very different ways depending on the actors and the meaning and referent of security. This has been illustrated in chapters four, five and six. Consequently, energy *security* works in different ways in different contexts, and attaching ‘security’ to energy has different meanings depending on what notion of security is used – sometimes it is more negative, and sometimes it is more positive. This illustrates the ‘constructedness’ of energy security and security. Thus, attaching security to energy can be positive or negative, and providing security for human beings and the environment necessitates moving towards a more positive energy security. Consequently, there is a need to recognise the contested nature of energy security to open up the meaning and work to move towards more positive notions of energy security in dominant discourse and practice.

While dominant discursive structures are often difficult to change, ‘they do have the potential for destabilisation and resistance’ (Hansen 2006: 212). This chapter has illustrated that it is not only possible to think energy security differently, but that this is already occurring. This has important policy implications, both illustrating that dominant, negative understandings of energy security continue to produce insecurity, and that change is possible. This thesis has illustrated that it is possible to think and practice energy security differently, but changing energy practice necessitates changing the understanding of security which underlies it. This does not have to mean the end of the state system, but it does necessitate a fundamental rethinking of state security practices. A positive energy security policy has to be based on sustainability, securing people and planet. Such policy is already being undertaken by some of the non-governmental organisations surveyed in this chapter. There is a need for multiple actors to provide positive energy security, among which the state remains important as a locus of power, resources and mobilisation. Using the framework developed here, it is possible to evaluate different energy security policies based on whether they promote more negative/positive notions of energy security, and thus to understand their value and move towards more positive notions of energy security. Moving towards more positive energy security is an incremental process that starts with opening up the meaning of energy security.

Moving towards more positive energy security discourse and policy is possible, as illustrated by the fact that there are already alternative discourses of energy security in both official and non-official discourses. At the global level, in June 2013 the International Energy Agency released a ground-breaking report detailing the need to refocus on the relationship between energy and climate security (IEA 2013d). This notes that ‘the world



is drifting further and further from the track it needs to follow’, and emphasises the need to recognise that ‘the energy sector is the single largest source of climate-changing greenhouse-gas emissions and limiting these is an essential focus of action’ (IEA 2013d). The number and range of policy solutions for a more sustainable energy security produced by non-state groups shows that a more positive energy security policy is possible in practical terms (see, for example, Greenpeace USA 2007; Greenpeace China 2007). One of the most common arguments against such a change is the need for continued economic growth. However, climate change provides the necessary imperative: we can no longer view continued economic growth in the traditional sense as essential for national security. Energy security can no longer involve maximising domestic fossil fuel production: ‘a warming world may pose the gravest threat to survival we face’, and that necessitates rethinking notions of prosperity and economic growth as well as security (Jackson 2009)<sup>21</sup>.

While there is little change in policy terms in the United States and China, the growing awareness illustrated in changing energy security discourses in both states does suggest there is potential for change. Some of the discourse of sustainability and human security has already slipped into official discourses, with growing consumption specifically regarded as a threat in China. Resonance and social context are noted as key factors affecting potential for change; following this, ‘security discourses are a product of a process of negotiation between political actors and the broader political community’ (McDonald 2012: 17). Thus, security is not just a top-down process where elites speak security and the audience accept or reject, but a two-way process of negotiation and construction. The growing number of groups and individuals in the United States and China contesting dominant energy security discourse and policy shows that the meaning

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<sup>21</sup> Tim Jackson’s *Prosperity without growth* (2009) provides an excellent discussion and agenda for rethinking economics in these terms.

and purpose of energy security is increasingly questioned. This is particularly notable in China, as a traditionally top-down political system is increasingly challenged – ‘environmental protests are becoming one of the biggest forms of social unrest in China’ (Duggan 2013). At a recent protest, a 24 year-old protestor was quoted in a local newspaper as saying “‘I hope this can be a good beginning for a dialogue between citizens and the government on major decisions’” (Duggan 2013).

This thesis has pointed to the need to open up the meaning of security to recognise notions of security that are not centred on national security or articulated by traditional actors. Security cannot be studied in the abstract, and means different things in different contexts – it can be negative, but it can also be more positive. The very range of energy security representations analysed here illustrates that ‘security’ as a concept is not fixed in meaning. This also illustrates the limits of securitisation theory, which is only useful for understanding very particular, negative (state) security practices. By dividing issues into spheres of ‘security’, understood in Schmittian, negative, friend/foe terms, and ‘politics’, understood as characterised by positive, open democratic debate (Wæver 2011: 420), the Copenhagen School fails to recognise that their positive sphere of open debate is not the opposite of security, but can in fact exist *within* security. It provides insights for the positive/negative security debate, illustrating that positive and negative security can co-exist. Moreover, the empirical analysis of energy security indicates that positive conceptualisations of security may be more likely outside state discourses. While the empirical analysis done here is limited and it is difficult to know with certainty how far it can be generalised, there is much potential for future research on broader security constructions. While there is no such thing as absolute security and there is always room for improvement, security remains a useful frame through which to view energy once more

positive notions of security are relied on. It retains positive connotations and mobilising power (McDonald 2012: 18).

This approach can open up avenues for theorising security positively beyond energy, as exploring potentials for security to be different allows a possibility to reorient the meaning of security (see Trombetta 2008)<sup>22</sup>. Trombetta's study of the link between the environment and security highlights that attaching 'security' to an issue may not be as simple as securitising it, but the characteristics of the issue being securitised also impact on the meaning of security (Trombetta 2008). Thus by highlighting more democratic, positive notions of (energy) security, the meaning of security itself can gradually be changed. In this sense, attaching security to energy may actually be positive for reconceptualising security, transferring meaning both ways: if security produces energy, energy also produces security: they are mutually constitutive. Alternative discourses change the meaning of security to empower actors beyond the state to speak and act security, reorienting the referent of security away from exclusive notions of national security and towards people, necessitating a sustainable energy security that secures people and the environment on which they depend. Vitally, security remains important: it is 'always powerful and never inconsequential, no matter how messy, frivolous or inconsistent the actors' use of the word may be' (Ciută 2009: 310).

## 6.5 Conclusion

The need for change in thinking on energy policy has been recognised for a long time, but there has been little progress. As early as 1987, the World Commission on Environment

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<sup>22</sup> It is important to note that as this research looks specifically at energy security, it is difficult to say how far the insights are useful for security more broadly. It raises some important questions, however, and clearly shows the need for further research into the value of security in other empirical contexts.

and Development (WCED)<sup>23</sup> was established by the United Nations in response to growing concerns about deteriorating resources and environment. It defined the meaning of ‘sustainable development’, noting that ‘[h]umanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs’ (World Commission on Environment and Development 1987: section 3: 27). It noted the need for a fairer distribution of global resources and the need for ‘effective citizen participation in decision making and greater democracy in international decision making’ (1987: section 3: 28). It also emphasised the need for renewable sources of energy to ‘form the foundation of the global energy structure during the 21st Century’ (1987: section 4: 62). Finally, it stated that

A safe, environmentally sound, and economically viable energy pathway that will sustain human progress into the distant future is clearly imperative. It is also possible. But it will require new dimensions of political will and institutional cooperation to achieve it (World Commission on Environment and Development 1987: section 4: 65)

This thesis suggests that the negative, national security constructions of energy security in dominant discourse and practice make possible a ‘business as usual’ approach to energy policy that continues to ignore the human and environmental insecurity it reproduces. Consequently, any change in thinking on energy security has to involve broadening the subject of security to ‘people in general...rather than just the citizens of states’ (Walker 1988: 121). It has to move from securing borders and state autonomy to ensuring the survival of humanity and the ecosystems necessary for continued human existence as we know it. Energy security both can, and is, being conceived differently. It is contested, and it is this contestation which provides potential for change.

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<sup>23</sup> Sometimes referred to as the Brundtland Commission as it was chaired by former Norwegian prime minister Gro Harlem Brundtland.

Once 'security' is no longer conceived solely as referring to the state's autonomy in the realm of energy supply, phrased as 'national security', but rather as referring to multiple, non-exclusive referents, such as the global environment and the people who rely on it, the solutions to the challenges of energy security are required to take on a more sustainable and long-term character. They actually provide security.

## Conclusion

*Profound changes are required in the way our society produces and transforms energy – nothing short of a paradigm shift is required.*

(United Nations 2010)

Energy security is one of the most important issues today, bearing direct impact on the continued survival of human civilisation as we know it. Problematically, contemporary understandings of energy security are closely linked with a traditional understanding of both energy and security: the emphasis remains on fossil fuels, and the security of the state remains at the centre. Not only is this understanding of energy security outdated, it is also counterproductive. As energy increasingly becomes incorporated in state security agendas, attempts by states to respond paradoxically produce insecurity; as currently understood, state pursuit of energy security makes states, human beings and the environment less secure. To understand this puzzle, this thesis has analysed the relationship between energy and security. Ultimately, energy cannot be understood as a security issue in isolation. The world is increasingly interconnected, and the growing speed of environmental and climate change ‘makes the necessity of rethinking security unavoidable’ (Dalby 2009: 172).

This thesis has raised questions over the meaning and ethics of energy security, discussing who or what should be secured, who speaks security and for what purpose, and whether security practice is useful or positive when it comes to energy. In this process it has argued

that security is not unequivocally ‘good’, or ‘positive’, but that security means different things and works in different ways depending on how it is used. It affirms an ethical commitment to making human beings the primary subject of security, following Walker (1988: 128). The growing interdependence of human beings and the environment, moreover (see Dalby 2009), make a stable environment and climate a necessity for people to be secure, today and in future years. Problematically, while energy security is undoubtedly increasingly important, it has been under-interrogated conceptually. The existing academic literature focuses primarily on solutions to energy security understood as secure supplies at stable prices.

In contrast, the focus here has been on investigating how energy security is represented and practiced, in short, how it is constructed; and how ‘security’ works in this process. In this way, this thesis builds upon a conceptual interest in energy security to analyse how it works in two different empirical contexts, using this to construct an account of the relationship between energy and security which is both conceptually developed and empirically informed. Ultimately, the purpose is pragmatic - to generate useful knowledge to understand how energy security works. The central research question, ‘how is energy security constructed in discourse and practice in the US and China’, has been addressed by looking both at dominant state constructions and marginalised state and non-state constructions of energy security, with a focus on what security does to energy in different constructions. Dominant state constructions are overwhelmingly negative, emphasising the need for continuous and secure (state) supplies of fossil fuels at stable prices, in the name of national security and continued economic growth. The state is reproduced as the referent object of energy security, with ‘others’ constructed as threatening and hostile, with a focus on energy independence or self-sufficiency in both states enabling a continued

focus on maximising domestic fossil fuel supply and production. Over time, while it is rarely defined, continuing high consumption of limited, finite and depleting resources is causing increasing tension as more and more states scramble for what is left. With this, the concept of energy security has evolved from describing a need for secure supplies to become almost synonymous with national security.

However, in both states there are alternative, more positive notions of energy security in the discursive space. In official discourses, they are a more recent development and so far remain marginalised while traditional understandings remain dominant. Consequently, they rarely filter into policy practice. In the non-state sphere, however, a growing number of groups is contesting dominant notions of energy security, and putting forward their own, more positive notions of energy security. These are centred around sustainability, and take an inclusive approach to the referent object of 'security', focusing on the securing of human beings and ecosystems, while also arguing in favour of a more inclusive policy process that allows for a wider range of actors and speakers of energy security. As understood in these positive discourses, security is not national autonomy or a stable free market, but stable ecosystems and secure human beings. Thus, if we look outside dominant constructions and traditional spaces, it becomes clear that energy security is increasingly contested.

Official constructions of energy security both legitimise and marginalise by establishing dominant notions of energy security as 'common sense', enabling particular policy choices in the name of energy security, while delegitimising others. They make possible a 'business as usual' approach to energy policy that continues to ignore the human and environmental insecurity it reproduces. However, this thesis has gone beyond challenging



dominant, naturalised assumptions about energy security to explore alternative ‘possibilities of being in the world’ (Berenskoetter 2011: 648). Locating more positive constructions of energy security in practice begins to disrupt traditional, more negative notions, and as such can open up space to move towards more positive constructions of security. The importance of locating these constructions in existing practices has been highlighted throughout as both a way to avoid imposing an abstract notion of emancipation and a means of ensuring focus on feasible forms of change, since these alternative understandings of energy security already exist in the discursive space. Vitrally, it enables a positive energy security agenda to harness the power in ‘security’, while rejecting exclusionary conceptualisations of security.

A traditional understanding of energy security that serves only the security interests of states is no longer useful or justifiable. Ultimately, if security is about long-term survival, then the national security project has failed. Any change in thinking on energy security has to involve broadening the subject of security to ‘people in general...rather than just the citizens of states’ (Walker 1988: 121). It has to move from securing borders and state autonomy to ensuring the survival of humanity and the planetary ecosystems necessary for continued human existence as we know it. Once the threat is no longer conceived solely as one affecting national (military/economic) security, but multiple, non-exclusive referents, such as the global environment and the people who rely on it, the solutions required by energy security become more sustainable and longer-term.

This thesis has argued that energy security in the United States and China is contested. It has shown that energy security means different things in different contexts, and it is sometimes more ‘positive’, and sometimes more ‘negative’ in connotations, character and

consequences. Using this, it has argued that dominant constructions of energy security are problematic and can be characterised as negative. However, if we look beyond these dominant constructions it is clear that energy security is sometimes constructed much more positively. This argument has been built over the course of six substantive chapters.

The first three chapters dealt with the literature, theory, research design and methods. Chapter one presented a critical review of the existing energy security literature, divided into 'logics' of security. Because of the relationship between academic and policy discourses, the texts analysed in chapter one contain both primary and secondary material/data (Hansen 2006: 83) and as such contributed to the empirical analysis presented. This chapter argued that the mainstream literature on energy security can be divided into realist and liberal logics of security, with some authors combining the two to present a 'comprehensive' version. However, while advancing different arguments and solutions to energy insecurity, these authors pursue logics of security with significant points of underlying similarity, based as they are upon similar assumptions about the international system and political order. The effect of this is to limit energy security conceptually, effectively limiting the parameters of the energy security debate and closing off avenues of consideration which this thesis argues are essential to an analysis that addresses the actual security needs of people and planet. The chapter then discussed the limited existing critical work on energy security. While this literature remains underdeveloped, it does open up the space and agenda of energy security studies to question the traditional understandings. However, it remains abstract and theoretical, with few studies looking at how energy security is constituted in particular empirical cases. Likewise, the existing critical literature does not consider the ethics of energy security in

any depth. An assertive normative dimension is important, and lacking in much critical work on the topic.

Chapter two outlined the conceptual framework underlying the thesis, starting with a discussion on methodology, before outlining critical constructivism as an approach. It then discussed energy and security and the relationship between them in more detail, drawing on critical approaches to security. It outlined the relationship between this research and securitisation theory, before discussing the ethics of energy security and normative agendas in critical security studies. Lastly, it discussed the emerging literature on the ‘value’ of security, outlining where this approach differs from existing ones, and suggesting that the value of security needs to be assessed in a way that appreciates that it may vary between different contexts. Chapter three presented the research design and methods, starting with a discussion on research design and case study analysis, choice of cases and choice of discourses to study, linking this both with my normative agenda and the role of power, and with a pragmatic and reflexive agenda, highlighting the need for reflexivity<sup>1</sup> and being open about choices made during the research process. The chapter also discussed practical issues affecting research design. This was followed by a discussion on research methods divided into data collection and data analysis, addressing both interviews and virtual archives.

Chapters four, five and six presented the empirical work undertaken. Chapter four presented an analysis of dominant energy security constructions in the United States, beginning with a contextual discussion on the policy-making process and history of energy in the United States, before analysing energy security policy between 2004-2012 and the

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<sup>1</sup> Reflexivity is important to allow ‘researchers to trace out the ways in which very specific instances of their positionality affect their research accounts and the knowledge they claim on the basis of those accounts’ (Schwartz-Shea and Yanow 2012: 102).

discourses which made those policies possible. Chapter five followed the same structure, presenting the analysis of dominant energy security discourse and practice in China. Chapter six drew out the official constructions of energy security in chapters four and five, relating these to the debate over ethics and security. This was then used to develop a notion of negative energy security. The chapter then went beyond this to draw out the contested nature of energy security, looking at marginalised alternative, more positive notions of energy security, looking at both official – state – and non-state constructions and drawing out key themes. Finally, it used this to develop an understanding of what a more positive energy security can look like, and the implications for thinking, analysing, speaking and practicing energy security differently. As such, it placed the research back into the debate on the value of security, presenting a framework for understanding the value of security in context. It illustrated the contested nature of energy security, the potential to disrupt dominant official notions of energy security and highlight the potential for change.

### **Contribution**

The primary contribution of this thesis lies in bringing together conceptual insights from critical approaches to security with empirical cases from the subfield of energy security studies to understand how energy is constructed as a security issue, arguing in the process that the result is a failure ultimately to provide security in any meaningful sense. As has been noted, despite the growing significance of ‘energy security’ within the realm of policy the concept itself has largely escaped critical scrutiny. Likewise, critical work has tended to look at ‘security’ as an abstract whole rather than energy specifically, and where it has touched on the issue of energy it has thus far not engaged in the level of empirical detail offered by this thesis. As an increasingly important area of research, energy security

provides new insights for critical security studies, most notably raising questions about how security in particular ‘works’ – and what it ‘does’ – when attached to energy. Thus, this research presents the first in-depth critical empirical analysis of energy security constructions, going beyond abstract calls to redefine security to analyse how it is used and what security itself means in different constructions, showing that energy security is contested and drawing on alternative, positive constructions to illustrate and open up the space for change.

To this end, the thesis provides in-depth and empirically rich analysis of how energy security is understood and constructed in discourse and policy in the US and China, drawing on over 700 documents and original interview data with experts and policy-makers. In this process, it illustrates a clear problem with the way in which energy security is approached: it does not, and cannot, produce security. Problematically, the existing energy security studies literature overlooks the construction of energy as a security issue and remains focused on solving state fossil fuel supply problems, rather than questioning or interrogating what this very specific understanding of energy security does. It is clear that the meaning of energy security is contested, particularly once we look at notions of energy security promoted by non-state actors. However, because of its narrow focus, the existing literature on energy security cannot make sense of this contestation. Moreover, as discussed previously, it fails to recognise that a (negative) understanding of energy security contributes to and reproduces insecurity. Likewise, it cannot provide any potential for changing existing policy or moving away from the current energy security dynamic. By drawing on critical approaches to security, this thesis highlights the constructed and contested nature of energy security, in the process opening up potential for movement

towards more 'positive' energy security practices. This has clear implications for thinking, analysing, speaking and practicing energy security differently.

In turn, applying critical approaches to understand energy security raises theoretical questions about how 'security' works and what it 'does' when attached to energy. Energy poses new challenges for understanding security; most notably illustrating that 'security' does not work the same way in all contexts. Overall, energy security is contested – it means different things to different people in different contexts. While some constructions of energy as security are negative, others are more positive. This raises important theoretical questions about the importance of context for understanding the value of security and the potential for moving towards more 'positive' energy security discourse and practice.

Critical approaches are often too quick to dismiss security. While it has been used in problematic ways by states, and has often had the very negative consequences that these authors suggest, security has also historically had many positive connotations and consequences. In effect, the meaning of security is not fixed, and neither is its value. Ultimately, something about security is desirable; there is a reason that states have been able to use the concept to justify a growing number of policies. This thesis has argued that there is something about security that is worth attaining, but that there is a clear need to distinguish between different notions of security based on their value. Security has a lot of power, and given that it sometimes already has a positive value it is worth recognising positive security constructions which often lie outside the remit of both traditional and critical theories of security. Generally, these theories have struggled to capture these more positive notions of security, and the ongoing contestation. By drawing on these, and

highlighting the contested nature of security, this thesis has argued that it is possible to move towards more positive security practices. Rather than imposing an abstract notion of emancipation, therefore, the emphasis here is on resistance and contestation – alternative practices – and giving marginalised voices the power to speak security, without ignoring traditional voices. Consequently, there is a need to study positive security practices – in discourse and policy, state and non-state – to ground alternative, positive notions of security in existing, alternative political practices, highlighting contestation over security rather than closing the concept down.

Vitally, understanding the ethics and politics of security is a key part of the critical security studies project, in which it has so far not delivered on its promise (Browning and McDonald 2013). This thesis has added an empirical study of energy security in the United States and China to this project. Ultimately, it has sought to move away from abstract theorising of security towards a more pragmatic, policy-relevant approach, using empirical analysis of a range of sources to illustrate that energy security constructions range from more negative to more positive, using already existing constructions of energy security to develop an idea of what a more negative and a more positive energy security policy looks like. This has suggested that security can never be unequivocally ‘good’ or ‘bad’, but is always contextual and always changing.

Of course, attempts to reimagine the world are necessarily always ‘partial and situated’ (Weldes et al. 1999: 21). However, the overall aim here has been to encourage wider theoretical and conceptual debate over the concept of energy security in a changing world, rather than to impose one account of energy security as the only viable approach. As such,

the approach suggested here is an alternative, not a replacement, and certainly not the only alternative.

This research also has some implications for the fields of energy security studies, critical security studies, and for IR more broadly. It shows that energy security studies needs to become more reflective, to recognise how and why they use the term energy security, and how the way in which they use it works to enable particular policy choices<sup>2</sup>. It has also begun the process of problematising the notion of energy security. Both realist and liberal energy security discourses fail to consider resource depletion and limitation. Problematically, dominant academic and policy discourses of ‘energy security’ remain centred on fossil fuels, and oil in particular, and so in a sense mainstream energy security is also finite. Ultimately energy security is not just about securing supplies at stable prices. Saying and/or claiming that it is involves taking an implicit ethical stand, and this needs to be recognised. While there are some signs of change in thinking on energy security, these have yet to filter into policy in any significant way (for example, see Ahmed 2013). It is important to note that as this research looks specifically at energy security, it is difficult to say how far its insights are useful for understanding security more broadly. It raises some important questions, however, and clearly shows the need for further research into the value of security in other empirical contexts. Likewise, it suggests there is a need to study positive security practices – in discourse and policy, state and non-state – to ground alternative, positive notions of security in existing, alternative political practices, highlighting contestation over security rather than closing the concept down. Moreover, more empirical areas of study in International Relations need to engage more openly with ethics and normative choices, as there is little dialogue between theorists and those

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<sup>2</sup> It is important to note that an expanded definition of energy security opens up the number of contemporary energy security challenges (Sovacool 2010a: 11-31). However, it is essential to be clear what exactly we mean when we talk about energy security.



focusing more directly on policy questions (for a more in-depth argument on this, see Price 2008b).

### **Limitations and future research**

Like all research constrained by time and practical concerns, this research has a number of limitations. I made the deliberate choice to focus on how energy security is constructed, pursuing a critical constructivist approach. There is no analysis of intentions behind these constructions, as the focus is on what they *do*, in terms of enabling policy choices. In this sense, it has covered a gap, analysing energy security constructions and what they do in-depth, which has not previously been explored in this way. However, it does not offer solutions to energy security as traditionally understood, providing no in-depth discussion of how to provide states with secure energy supplies at stable prices. This does not mean that this is of no concern, merely that this is dealt with better elsewhere and is outside the boundaries of this research, which focuses on the limitations of such an approach when it comes to providing for security more broadly conceived.

Likewise, the research looks only at two empirical cases, during a limited time period and with limited resources, focusing primarily on how the concept of energy security is constructed. Much more research needs to be done into how energy security works. The decision to focus only on two empirical cases was taken in order to ensure depth, given the lack of previous work on the constructed nature of energy security. Likewise, the focus on the US and China as states where energy security is a big concern presents a dominant notion of energy security which is likely to differ from how energy security is understood in states which do not have the same energy needs. On the other hand, as the US and China are both the largest energy consumers and the largest carbon dioxide emitters globally,

which in a sense makes their energy choices the most problematic and thus the most important to understand. Moreover, the analysis of marginalised discourses presents a starting point, illustrating contestation rather than the entirety of competing discourses. Thus in empirical terms, this project began with states, but it does not end there. Of course, the research only provides one, situated answer to how energy security is constructed. As such, it does not claim to provide the singular neutral or objective ‘truth’, but rather to suggest one possible solution to how we can rethink energy security and move forward towards more positive energy security practices.

It is clear then that there is much space for future research. While this research opens the space for change, more work, both in the academy and in the realm of public and policy advocacy, needs to be done to change thinking on energy security. Theoretically, much more work is needed to resolve the tension between relativism and critical theory in critical constructivism. There is also a need for more study of the contested nature of security, especially non-state understandings and constructions of security. Such work also needs to consider how we can study the value of security in cases where (in)security concerns are not, and perhaps cannot be, articulated (Hansen 2000).

In the area of energy security, more work needs to be done on discourses on energy security surrounding specific events. This could include periods of price volatility vs periods of calm, oil spills, and politically significant events relating to energy security. Cultural and visual representations of energy security would be another interesting area for future research. Likewise there is a need for further research into non-state and/or everyday notions of energy security – a focus group study with the general public discussing what they see as the key priorities when it comes to energy security would be

particularly interesting. Alongside this, further research into the role of the energy industry in shaping policy in different countries would add another layer of depth. Lastly, more research needs to be done into energy governance, energy poverty and inequality, and the relationship between energy and development.

This research has drawn on normative approaches to security to attempt to envision a more positive notion of energy security, based on sustainability, human welfare and participation. It presents only a beginning, but it is clear that it is time to rethink energy security.

## Appendix

### Appendix 1: List of Interviews

<b>Name</b>	<b>Location</b>	<b>Relevance</b>
Zha Daojiong	Beijing	Academic at Beijing University, researches US-China energy relations
Qu Xinhua	Beijing	Renmin University, researches China's international energy policy, has also done work for the Energy Research Institute in the NDRC
Gao Shixian	Beijing	Works in the Energy Economics and Strategy Research Center of the Energy Research Institute of the National Development and Reform Commission (NDRC)
Erica Downs	Washington DC	Works at Brookings, as a Chinese energy policy expert
Kevin Tu	Washington DC	Works at Carnegie, researches China's energy and climate policies, used to work for Sinopec
Joanna Lewis	Washington DC	Works at Georgetown University, researches US-China cross border technology innovation in clean energy research and development, the evolving nature of US-China relations on energy and climate
Jin Canrong	Beijing	Works at Renmin University, director of Center for Energy Research, expert on US-China relations more broadly
Robert Cekuta	Washington DC	Principal Deputy Assistant Secretary, Bureau of Energy Resources, US State Department (deals with international energy policy)
Casey Delhotal	Washington DC	Director, East Asian Affairs, Office of Policy and International Affairs, US Department of Energy
DoE official	Washington DC	Official working in Department of Energy (background)
Banning Garrett	Washington DC	Works at the Atlantic Council, US-China energy and climate relations expert, has worked on strategic dialogues with China since 1981

David Pumphrey	Washington DC	Works at Center for Strategic and International Studies (Energy and National Security Program), also ex-Deputy Assistant Secretary for International Energy Cooperation at the Department of Energy
Robert McNally	Washington DC	2001-2003 served as the top international and domestic energy adviser on the White House staff, in 2003 was Senior Director for International Energy on the National Security Council
Caitlin Campbell	Washington DC	US-China Economic and Security Review Commission Staff Energy Analyst
Jeremy Schreifels	Washington DC	Works for the Environmental Protection Agency, designs climate programs and works on US and Chinese climate policy
Jerry Taylor	Washington DC	Works at the Cato Institute, researching international oil markets
Kenneth Lieberthal	Washington DC	China expert at Brookings, former special assistant to the president for national security affairs and senior director for Asia on the National Security Council from August 1998 to October 2000
Dennis Sherman	Washington DC	International energy advisor, used to work for Exxon-mobil, in international energy strategy
Taiya Smith	Washington DC	Used to work for the US Treasury department, led the founding of many of the key US-China energy dialogues in the 2000s under Secretary Paulson, including the Ten Year Framework
Elizabeth Wishnick	Washington DC	Chinese foreign and energy policy expert at Columbia University
David Goldwyn	Phone interview	State Department's Coordinator for International Energy Affairs 2009-11, also former U.S. Government Assistant Secretary of Energy for International Affairs, worked on energy policy during the Clinton administration. Created Global Shale Gas Initiative and took part in a number of bilateral dialogues with China. Has also published extensively on energy security.
Anonymous	Beijing	-

Anonymous	Beijing	-

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