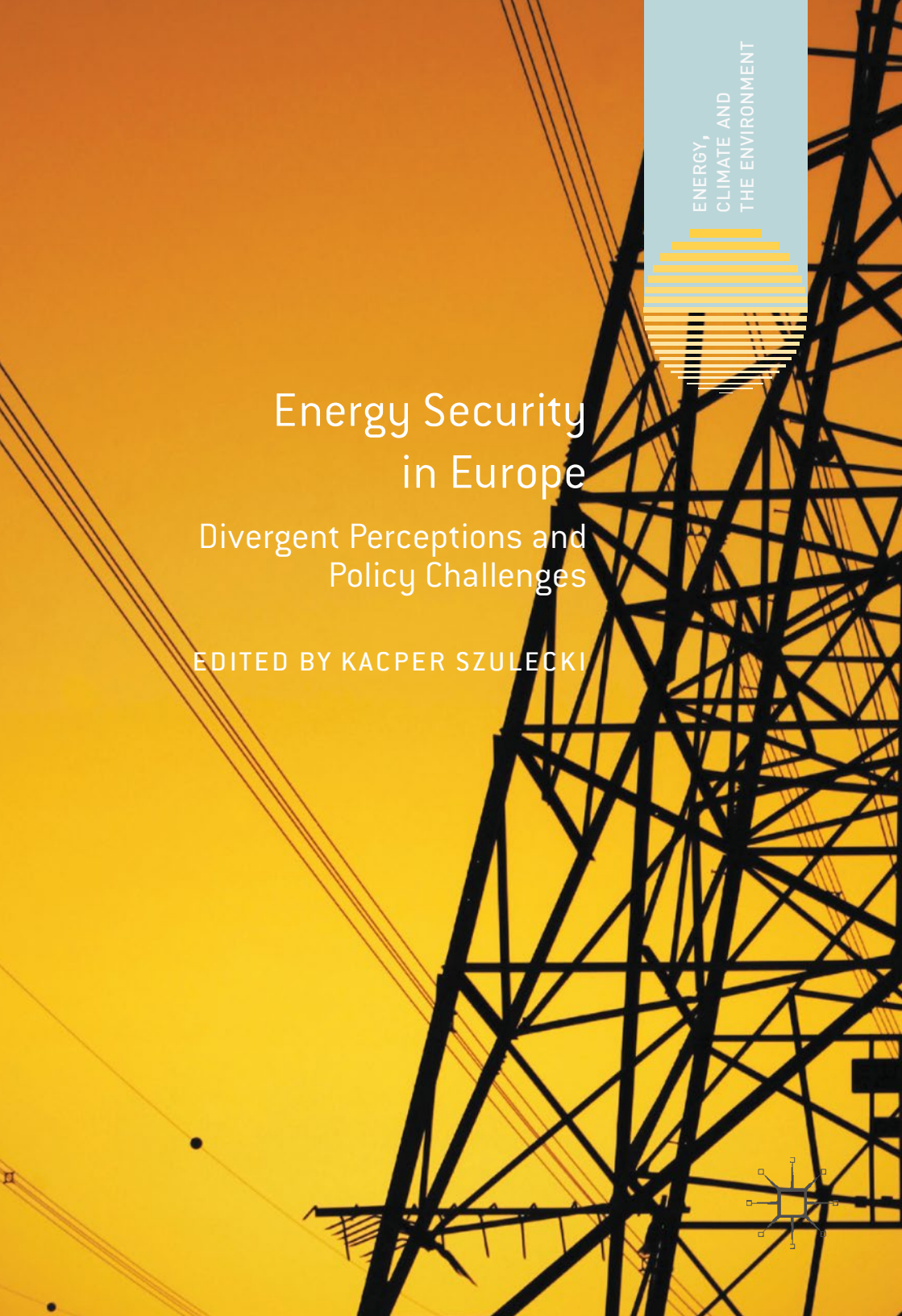

Energy Security in Europe

Divergent Perceptions and Policy Challenges

EDITED BY KACPER SZULECKI

Energy, Climate and the Environment

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The Open University
Milton Keynes, UK

'This book is unique since it is among the few that examine the 'subjective' aspects of energy security in a variety of places and societal contexts. The book is a ground-breaking work in that it scrutinizes how the concept of energy security is linked with vulnerabilities and how it is invoked by different stakeholders. The contribution of this rigorous book is twofold. First, on an academic level, it relates to all disciplines that seek to unpack how rhetoric, discourse and framing modes, around seeming threats, are constructed and mobilized around energy policy. Second, it relates to how policy makers and practitioners struggle to craft policy that is both politically feasible and economically and environmentally effective. In this respect, this volume provides hands-on case studies on how to mobilize support through securitization along with an analysis of the downside of such a framing mode.'

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'This book takes on a challenging task: questioning the mainstream consensus in European energy policy debates. It excels on all fronts. Bringing together an excellent group of scholars, this volume offers an inter-subjective approach to energy security—conceptually sharp, empirically rich and theoretically brilliant.'

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'Energy securitization has always been a hard case for securitization theory. This book unlocks some of its most powerful paradoxes, in particular the relation between politics and security, the articulation of subjective and objective aspects of security, and the interaction between positive and negative securities. It is theoretically diverse, forward looking, and empirically well researched, with cases spanning a broad range of sectors that constitute energy security—from problems of extraction to market liberalization through ethical issues, known under the label of sustainability. The book will be of interest to those who study security, securitization, and energy politics/policies.'

—Thierry Balzacq, *University of Namur, Belgium*

Kacper Szulecki
Editor

Energy Security in Europe

Divergent Perceptions and Policy Challenges

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Foreword

How much and what kind of energy we extract, trade and use has a profound impact on security and sustainability in the twenty-first century. The global energy challenges range from connecting to the grid over a fifth of humankind who still live without electricity to replacing fossil fuels that currently provide over four-fifths of our energy with cleaner energy sources. While natural scientists, engineers and economists scramble to advise policymakers on the best way to solve these dilemmas, it falls on political scientists to explain why such advice is rarely followed. Unfortunately, few political scientists meet this challenge and go beyond the insights which emerged from the 1970s oil crises echoed in the gas conflicts during the early aughts. This book is an exception: it contains a fresh and novel look by a group of political scientists, most of them at the start of their careers, at one of the most intractable and fascinating energy problems: energy security.

As a policy problem, energy security is surrounded by confusion defined by two extremes. On the one hand, there is a popular mantra that 'energy security means different things to different people'. On the other hand, there are scholars who believe that energy security should be captured in universal esoteric and barely comprehensible indicators and formulae based exclusively on technical energy systems analysis. Both views hinder policy comparison and learning since they either deny that there

is anything to be compared or neglect the actual views of policy stakeholders who are supposed to benefit from this comparison and learning. In our work on the Global Energy Assessment and other interdisciplinary projects, we tried to forge a middle ground that would enable a rigorous analysis of energy security and, at the same time, explain observed variety of perspectives and priorities. In order to do that, we defined energy security as 'low vulnerability of vital energy systems'. This approach has helped us to analyse security of diverse energy systems at different scales, in different polities and during different time periods. Though we primarily adhere to positivist energy systems analysis, we have always stressed that 'vital systems' and 'vulnerabilities' are not only objectively identified but also intersubjectively constructed. We have also challenged social scientists to explore the mechanisms of this construction.

This book has boldly taken up this challenge by examining the 'subjective' aspects of energy security with unprecedented methodological and conceptual clarity. By connecting vital energy systems and their vulnerabilities with the concepts of 'referent objects' and 'threats' from the securitisation theory, it proposes a powerful analytical framework for understanding energy security politics. It contains rich and fascinating stories of energy debates in Poland and Germany which invoke the concept of energy security with respect to the Nord Stream natural gas pipeline (Chap. 3), shale gas (Chap. 4) and renewables, nuclear and the power sector (Chap. 5). The debate is expanded beyond these two countries to the EU as a whole in Chaps. 7, 8, 9, 10, 11 and 12.

More important than the empirical case studies are conceptual advances in energy securitisation theory which can be applied beyond the particular sectors and countries described in the book. For example, the book makes a crucial distinction between energy security rhetoric and concrete policy proposals. It introduces the concept of 'security jargon' (Chap. 2) when threats are discussed without calls for concrete measures (see a particularly convincing illustration with respect to discussions of the Nord Stream gas pipeline in Poland in Chap. 3). This distinction is important for distinguishing political rhetoric and action important in all fields of energy policy, not just in energy security. The authors also note that policy proposals arising from securitising speech are rarely 'extra-ordinary',

as presumed by mainstream securitisation theory. In fact, the book describes only one set of clearly extra-ordinary policy: regulating the construction of the first nuclear power plant in Poland (Chap. 5). This echoes our own observation that mobilisation of commitment and resources necessary for launching national nuclear programmes often requires the presence of real or imagined energy security threats. Beyond such outstanding cases, energy security considerations usually prompt only trivial and incremental policy action.

The book also identifies unresolved problems and promising directions for further research (primarily in Chap. 6). One of these is a problem of causality: do securitising speech acts precede, follow or exist separately from change in policy and material circumstances? For example, it is a widespread view that the Nord Stream pipeline has improved Germany's gas supply security and undermined Poland's political position and economic revenues. How is this common-sense understanding improved by demonstrating that the pipeline is portrayed as more threatening by Polish policymakers than by their German counterparts (Chap. 3)? The book makes it clear that a useful theory of energy securitisation should move beyond examining isolated political speech acts by bringing in analysis of material contexts, sociological networks and power relations. It would be interesting to see the application of the energy securitisation theory beyond political rhetoric, for example, to discourses of technocratic elites who engage with more nuanced and sophisticated realities of energy systems than superficially understood geopolitics.

Finally, the book touches upon a fascinating subject of the boundary between energy security and other energy policies. It demonstrates that securitising speech often crosses this boundary casting technological modernisation, mitigation of global climate change, employment, and competitiveness in terms of threats and vulnerabilities. Chapter 11 proposes that some of these energy policy objectives can be viewed as 'positive security'. The question is whether such policies can still be effectively analysed within the securitisation framework or whether, instead, the framework should be modified or complemented by other theoretical and analytical tools. While solving this puzzle is outside the scope of the book, it provides an invaluable foundation for answering and even asking

such questions. On the whole, it is a must-read for serious social scholars interested in the new science of energy security.

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The Multiple Faces of Energy Security: An Introduction

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1 'Energy Security' in Europe: Setting the Scene

> The European Union's prosperity and security hinges on a stable and abundant supply of energy. The fact that citizens in most Member States have not had to experience any lasting disruption of their energy supply since the oil crises of the 1970s' is a testimony of the success of the Member States and the EU in guaranteeing this. For most citizens, energy is available 'on tap', it is ubiquitous and un-intrusive. This has a major influence on the factors that affect national decisions on energy policy, with security of supply not being on par with other considerations. (European Commission 2014: 2)

This opening paragraph from the 2014 'European Energy Security Strategy' captures the total nature of energy in our modern societies (Ciută 2010). It is omnipresent, it is abundant and it is 'on tap'—at least that is the societal expectation. For years, the apparent smoothness of

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energy provision made 'energy security' a secondary priority in Europe (Szulecki and Westphal 2014: 46–7). That smoothness covers the degree of import dependence of the European Union (EU), which imports more than half of all the energy it consumes, including 90% of crude oil and 66% of natural gas (European Commission 2017). This attitude changed to a large extent following the winters of 2006 and 2009. After the Eastern enlargement of 2004–2007, the European Union (EU) became a community with a much larger variance of energy systems. The temporary disruptions of gas supplies following the Ukraine-Russia gas disputes had a direct impact on EU citizens, particularly in the 'New' Member States of Central-Eastern Europe. That moment was a 'stark wake up call' (European Commission 2014: 2) for policymakers, making the need for a revised approach to European energy supply security evident.

'Energy security' began gaining prominence in the EU political debate (Natorski and Herranz Surrallés 2008; Bridge 2015) and turned into something of a catchy 'buzzword', attracting media attention. In the years following the two gas disputes, that increased interest and media presence of the 'energy security' concept hardly translated into European level policy change, though the 2009 dispute was followed with the adoption of the Third Energy Package—soon becoming an important base for efforts to integrate and harmonise EU energy governance. However, it was also increasingly apparent that the way Member States perceive, define and act upon 'energy security' varies across Europe and creates a very fragmented policy landscape (Szulecki and Westphal 2014: 46).

A strong push for dealing with this problem came in the aftermath of the Russian annexation of Crimea in March 2014 and as a result of the enduring armed conflict in Ukraine (see: Chap. 7). The first sign of a changing climate in EU energy policy was the above cited 'European Energy Security Strategy' released in May 2014, displaying 'an unprecedentedly geopolitical tone' (Youngs 2014). In October, the Commission published the results of stress tests in the European gas sector, showing that a complete halt of Russian gas imports or a disruption of Russian gas imports through Ukraine 'would have a substantial impact on the EU' with Eastern members and Energy Community countries 'particularly affected' (European Commission 2017). What the report highlighted was the need for cooperation—because in a functioning integrated gas

market, the Union could sustain supply disruptions lasting even six months. The need for increased solidarity in energy policy became the crux of Polish prime minister Donald Tusk's proposal for an 'Energy Union' presented in April 2014 (Tusk 2014), and later taken up, reshaped, by the new Commission under Jean-Claude Juncker (Szulecki et al. 2016). Unfortunately, 'too often energy security issues are addressed only at a national level without taking fully into account the interdependence of Member States'—noted the Commission. 'The key to improved energy security lies first in a more collective approach through a functioning internal market and greater cooperation at regional and European levels' (European Commission 2014: 2).

If EU Member States face similar energy security challenges on many occasions, but often opt for differing interpretations and policy solutions, how can we assess the potential for energy cooperation among them and at the EU level in general? Divisions are no longer only between 'old' and 'new' Member States (Mišík 2017), they cut across seemingly established political and geographical regions, as countries follow a multitude of paths in different energy sectors. The divergent understanding and different policy implications of 'energy security' make the debates around it one of the biggest challenges to the development of a common European energy policy.

What are these divergent understandings? How do they differ between states, energy sectors and within each sector? Understanding the scale but, more importantly, the reasons behind the apparent divergence in perspectives on 'energy security' in Europe has been the main driver behind this book. The volume gathers contributions from a set of authors with different disciplinary, institutional and national backgrounds, united by an interest in the policy challenges that Europe faces in the energy sector and in the reluctance to take 'energy security' at face value. The aim of this volume is to challenge the visible mainstream consensus in energy policy debates, which simply detours the problem of defining, understanding and theorising 'energy security'. It combines a critical review of existing approaches with theoretically grounded empirical studies at two levels: internal and external. The former draws on securitisation theory to trace and understand within-EU variation in energy policy,

while the latter applies a spectrum of different approaches to the problem of EU's energy import dependency.

This introductory chapter begins with a review of the academic discussion on the way 'energy security' should be understood. After presenting the most conventional definition, I distinguish between three main approaches to elaborating and (re)defining that notion, and argue for the importance of an analytical concept of 'energy security', allowing to distinguish it properly from other areas of security and other policy fields. Defining energy security as 'low vulnerability of vital energy systems' (Cherp and Jewell 2014), allows for the operationalisation of the general research problem posed earlier. I then present the rationale of the two parts of the book and the research questions they try to answer, and conclude with an overview of the chapters.

2 Conventional Approaches to 'Energy Security'

What is 'energy security'? This seems to be one of the favourite questions many political scientists like to ask—and give very different answers to. For sure, this is a policy-relevant and timely topic, and having a clear idea what is at stake is important. Reading the previous section, one could think that, in Europe, 'energy security' is shorthand for 'reliability of natural gas supply'—but that is, of course, a caricature. As noted, over the last two decades, it has developed into a buzzword, with the content very often left undefined. A wide range of academic journal publications and think tank reports leaves the meaning of the term implicit, assuming the meaning is agreed upon or simply does not need to be specified (Austvik 2016; Carroccio et al. 2016; Kline et al. 2016; Layton 2014; Mišík 2017; Orttung and Overland 2011; Rasul 2014; Smith-Stegen 2011; Stulberg 2015; Sussex and Kanet 2015; Tunsjo 2010; Wigell and Vihma 2016; Zabyelina and Kustova 2015; Ziegler 2013). Certainly, in policy discussions, it might seem to be a waste of space and unnecessary intellectual hair-splitting to constantly re-establish the meaning of a basic concept like this. After all, we do not go around defining 'democracy' in every conversation and every op-ed, do we?

If 'energy security' does not need to be defined, it is because it indeed rests on some minimal or, better, a smallest common denominator kind of 'conventional' definition which is generally accepted. It will not be very controversial to say that the 'classic' definition, associated with Daniel Yergin, serves that purpose (Yergin 1988, 2006). 'The objective of energy security'—writes Yergin—'is to assure adequate, reliable supplies of energy at reasonable prices and in ways that do not jeopardize major national values and objectives' (1988: 111). The definition is simple, but it is difficult not to note that elements such as 'reasonable prices' and 'major national values' beg further scrutiny. The International Energy Agency (IEA) defines energy security as the 'uninterrupted availability of energy sources at an affordable price'. Both the IEA's definition and the classic formulation by Yergin share a common root. They grow out of the study of the global oil supply, and they are influenced by the experience of the 1973 oil crisis (see: Perlot and Hoogeveen 2007).

It is also clear that the definition is constructed from the perspective of policymakers, public officials and decision-makers responsible for running a state. In fact, Yergin explicitly calls energy security an 'objective'—and so, a policy *goal* rather than a *state* or *characteristic* of the energy system. The general idea of energy security as a particular policy goal remains also in the slightly more complicated though increasingly popular idea of the 'four As' of energy security: *availability*, *affordability*, *accessibility* and *acceptability* (see: Cherp and Jewell 2014). In its conventional use, 'energy security' denotes a certain state of *equilibrium* of energy relations. And indeed, 'energy equilibrium' could perhaps even be used as a synonym of energy security in most contexts. Importantly, in its emphasis on availability and affordability, 'energy security' draws much more on the semantics of the verb *to secure* than the noun *security*.[1] In many policy contexts, however, when the object (security for whom?) is left unspecified, the meaning of energy security is close to energy procurement. This is in line with the widespread equating of energy security with supply security.[2]

The idea that energy security is a particular policy objective of the nation-state is not only strongly embedded in public administration and policy-making circles across the globe—it also seems to be the most popular and practically accepted way of approaching the question of what

'energy security is' in scholarly literature. Conventional definitions based on the minimal, classic-inspired framework with 'availability' (having enough energy) and 'affordability' (being able to pay for it) is broadly accepted and sometimes called up in analyses, even if only in ritual form (e.g. Cao and Bluth 2013; Chakrabarti and Arora 2016; Cheon and Urpelainen 2015; Hughes 2012; Kalicki and Goldwyn 2013; Kurian and Vinodan 2013; Kama 2016; McCollum et al. 2014; Molyneaux et al. 2016; Månsson et al. 2014b; Narula and Reddy 2015; Proedrou 2016a, b; Sander 2013; Speight 2013; Vivoda 2012). Moving with the *Zeitgeist* (and the warming planet), some have also begun to add an environmental component, which emphasises that energy has to be secured not just reasonably cheap, but without drastic environmental impacts (Brauch 2015; Mišík 2016; Narula and Reddy 2015; Szulecki and Westphal 2014).

It would be a mistake to say that this conventional definition is wrong; it is just not very clear and ultimately—*not very useful*. Widely shared among practitioners, it surely says something important about energy security as a policy goal. To once again draw a parallel to studying democracy, this conventional definition would be akin to defining democracy as 'having your voice heard and having a good government'. This certainly does convey some meanings and expectations associated with a democratic political system, and might even help in distinguishing a democracy from a dictatorship—but comparing the quality or depth of democracy or understanding what makes democratic governance 'good' requires a different kind of definition.

More recently, in energy security discussions, there has been a growing understanding that oil is not all—far from it, that the idea of energy security has to be thought through and reformulated to work for different energy sources, systems, technologies and different contexts. Yergin importantly proposed to expand the scope to all energy sectors and 'to include the protection of the entire energy supply chain and infrastructure' (Yergin 2006: 78). Ways of expanding that scope are multiple, but before we briefly survey them, it is important to ask the fundamental question: why are we doing this?

Consider this: natural gas accounts for 13% of Poland's primary energy supply, a third of it is extracted domestically, and 80% of the remainder is imported from Russia. In the neighbouring Slovakia, gas supplies 30%

of primary energy, only 2% is produced domestically, and imports are almost exclusively from Russia (99%). And yet it is in Poland that discussions about the country's dependency on Russian energy imports and the imminent endangerment of its national security has sparked political controversy and has put a strain on the relations between Warsaw and Moscow. Clearly, 'energy security' as a *political concept* has dynamics that escape a one-size-fits-all, policy-objective type of definition. If energy security is 'context dependent' what does that mean?

The case of Poland and Slovakia is by no means unique. Differences in understanding and in perceiving energy security occur between states, between organisations, companies and non-state actors, between politicians and commentators, as well as between different groups within the society. Why, for example, has the Nord Stream pipeline project—building a direct supply link between Russia and Germany under the Baltic Sea, sparked such a controversy across Europe (a case to which we shall return several times in the following chapters)? Why have all the sides of the conflict been citing 'energy security' as a justification for their actions and divergent evaluations of the project?

3 Inductive, Abductive and Deductive Approaches to Defining 'Energy Security'

In the light of such apparent differences in the way 'energy security' actually functions as a concept, a policy goal and a rhetorical commonplace, scholars have proposed three different strategies for redefining and understanding energy security. These can be fairly neatly (though admittedly not absolutely accurately) categorised as *inductive*, *abductive* and *deductive*.

An *inductive* approach to the meaning of energy security relies on casting a wide net to capture all the different kinds of meanings that are out there, in political and technical practice. It is motivated by the drive to 'open the black box of energy security' (Cox 2016) or to 'propose a workable framework' to objectively measure it (Sovacool and Mukherjee 2011). Research conducted in this vein values precision, nuance and

complexity, trying to *inductively* acquire some *conceptualisation* (much less definition) of 'energy security' from the policy practitioners and academic experts. The logic is simple and genuinely convincing: if we are interested in the way political and business actors understand 'energy security', why not ask them or trace the way they actually do it? Such attempts can rely on expert interviews and surveys (Cox 2016; Mišík 2016; Sovacool 2016; Sovacool and Mukherjee 2011), a query of (academic) papers (Månsson et al. 2014a, b; Winzer 2012), comparison of indexes (Narula and Reddy 2015) or policy document analysis (Aalto and Korkmaz Temel 2014; Nyman and Zeng 2016; Ang et al. 2015). What these attempts share is an appreciation for the diversity of meanings and perspectives on energy security, as well as a more or less explicit scepticism towards searching (and finding) a single definition of 'energy security'. 'It is…improbable, and perhaps undesirable, for researchers to agree upon one single definition and interpretation of energy security' (Månsson et al. 2014a: 2), and so the goal is 'not to generate an agreed-upon definition of energy security, but rather to shed more light on the diversity of perspectives among key energy experts' (Cox 2016: 2).

For sure, energy security perceptions can vary due to objective factors: resource endowment, geographical location, infrastructure and so forth. 'The concept of energy security varies between the producer, consumer and transit states'—write Dellecker and Gomart—'to complicate things further, the final concept of "national energy security" also depends on the individual countries' geographical location and domestic policies, as well as the traditional state, economic and business ties it entertains with its partners' (2011: 25). They can also vary, as Sovacool (2016) proposes, due to cultural differences.

While this idea is interesting, what the inductive approach tends to lead to is not necessarily in-depth research on the nature and roots of the context-dependent differences in perceptions, but rather large, at times—huge—sets of factors that need to be taken into account as elements of 'energy security'. Kisel et al. (2016) propose three 'layers', Radovanović et al. (2016) put forth six 'indicators', Ang et al. (2015) list seven 'themes' and Sovacool (2016) 16 'dimensions', while Sovacool and Mukherjee (2011) raise the bar to 320 'simple indicators' and 52 'complex indicators'. Although they provide a potentially useful way of comparing an

objectivised level of energy security across regions, states and localities, it is not clear whether they move us beyond the appreciation that 'energy security is indeed a highly context-dependent concept' (Ang et al. 2015: 1081). They seem to be stretching the meaning of energy security beyond something particular and towards a list of desirable components—a menu of a rational and well-designed energy policy (compare: Cherp 2012). Their potential input to explaining such cases as the earlier quoted Slovakia-Poland mismatch of energy security perspectives or the Nord Stream controversy is in detailed mapping of the national energy landscapes and possibly probing expert discourses—and so, providing typologies and a framework for descriptive background research. However, all too often, they are formulated in a prescriptive form as the 'correct' approach to designing sound energy security policies—which seems to be trespassing on normative ground in analytical shoes.

An *abductive* approach, much less popular in the literature, proceeds slightly differently and with very different results. Abductive reasoning starts with an observation of what is out there and then seeks to find a likely and possibly simple explanation. Ciută's (2010) conceptual notes are a good example. Similarly, to the inductively minded scholars, Ciută also begins with a broad literature review, surveying energy security definitions, but he does that not to render the rainbow of aspects taken into account, but to distil a narrow set of 'logics' that inform all these definitions. He distinguishes between the logic of war, the logic of subsistence and a 'total' security logic, each representing a very different paradigmatic perspective on energy security (compare other notable abductive endeavours: Cherp and Jewell 2011; Bridge 2015). This typology allows us to move beyond description. For example, by analysing energy security discourses in different EU Member States, we can suggest that the lack of understanding between country X and country Y in their perspectives on an infrastructural project like the Nord Stream results from a difference in dominant logics: 'war' logic that preponderates policy debate in one, and 'subsistence' logic visible in the other. We find a hint for moving a step forward in analysing the roots of these differences in what is otherwise an inductive survey of energy security definitions. Winzer importantly notes that 'the main reason for difference between energy security concepts is…the way in which the authors select the subset of…threats

that they consider in their analysis, [they focus] on different risk sources or choose different impact measures' (2012: 37).

Approaches to defining 'energy security' which I call *deductive* have a different goal. Whereas the inductive approach asks how practitioners and experts understand 'energy security', a deductive take asks how 'energy security' *ought* to be understood to make it analytically sharp and useful. This is based on a shared founding assumption which is, bluntly, that 'defining energy security takes more than asking around' (Cherp 2012). Such attempts can depart from Security Studies, to take the 'security' in 'energy security' more seriously (e.g. Cherp and Jewell 2014), or, for instance, from economics, arguing that 'without rigorous microeconomic foundation, the notion of energy security remains a vague catchword rather than an operational concept' (Böhringer and Bortolamedi 2015).

The goal is casting 'energy security' as an analytical concept, meeting such important scientific requirements as precision and delimitation from other concepts.[3] This is based on the assumption that energy security is indeed something unique, different from security in general (we come back to this discussion in Chap. 6). In a nutshell, it can be convincingly argued that within these two domains of security, *threats* are of a qualitatively different sort.

Yergin's (1988, 2006) proposals for ways to approach energy security certainly follow the deductive approach, as does Bahgat, suggesting that 'the notion of energy security is not an "either–or" proposition [but should] be understood as a "less–more" proposition in which the risks to energy security span a spectrum of possibilities' (2011: 213). An important shift, visible already in Yergin's (2006) article, is a 'systemic turn' towards understanding 'energy security' not only as something that occurs 'at the pump' and 'in the socket'[4] but is relying on a whole supply chain, comprising multiple elements. It includes infrastructure and more or less formal institutions, spanning from production, through transport/transmission to distribution and consumption (Johansson 2013a; Cherp and Jewell 2013; Johansson 2013b; Thangavelu et al. 2015). These systems can be delineated 'sectorally and/or geographically', where sectors can be 'the total primary energy supply (PES), individual

fuels, energy carriers, or end-uses', while geographic focus can be on 'individual nations, regions, or the global system as a whole' depending on the level of analysis (Cherp et al. 2016).

Such solidly grounded and analytical definitions are scarce. In fact, the only one which tries to cast energy security as an *ideal type*, emphasising an energy system's characteristics has been put forth only recently by Aleh Cherp and Jessica Jewell (2013, 2014). Drawing explicitly on Arnold Wolfers, in a clear attempt to combine the rich tradition of Security Studies with an independently evolving literature on energy security,[5] they specify what energy security would or should imply. Namely, they suggest that if energy security is indeed security, we need to ask: *security for whom?* for *which values?* and from *what threats?*—questions that most energy security conceptualisations not only fail to answer but forget to ask. They thus arrive at a simple but analytically significant definition of energy security as 'low vulnerability of vital energy systems' (2014). Defined by the threatening *lack*, the degree of resilience and preparedness is an objective fact or state that can be measured. This is the punchline of Cherp and Jewell's approach, bringing forth an energy security benchmark.

So does that mean that 'energy security' is an objective 'fact'? Not necessarily, because while we can design ways of measuring the level of vulnerability, understood as a function of exposure to risks and systemic resilience, it also leaves space for actors' interpretations of these vulnerabilities as well as the values and meanings they associate with the entire energy system because visibly, 'energy security and energy systems are value-laden' (Sovacool and Saunders 2014: 649).

> When defining energy security, secure supply, demand, transit, diversification of sources, price, and physical availability are the main elements to keep in mind. However, their relevance varies across countries and over time. Thus, we ought to conclude that the definition of energy security has much to do with a country's own particular situation and *the way it subjectively perceives its vulnerabilities.* (Skalamera 2015: 4, my emphasis – KS)

Which energy systems are vital and why? What constitutes a vulnerability and who defines it? 'Both vital energy systems and their vulnerabilities are not only objective phenomena, but also political constructs defined and prioritized by various social actors' (Cherp and Jewell 2014: 419).[6] In this way, Cherp and Jewell not only create a more objective benchmark against which different ideas about energy security can be evaluated but problematise 'classic' and inductive approaches, by casting their preferred definitions as something to be itself *explained*.

4 Mapping and Explaining Divergent Energy Security Perceptions

As the example of Slovakia and Poland as well as the early sketch of the Nord Stream controversy suggests, material aspects alone, stressed by objectivist approaches, cannot sufficiently explain this divergence of perceptions. Analyses relying on a 'classic' and unproblematic approach to energy security seem unable to identify what exactly triggers insecurity, as Guzzini points out in a general argument (2011). Accordingly, energy security cannot be analysed as an exclusively objective condition but is better understood as an intersubjective phenomenon.

Offering an input from interpretive political studies to interdisciplinary energy security studies (cf. Cherp and Jewell 2011: 211), 'energy security' should perhaps be understood as conditioned by the interplay of a *sociotechnical imaginary*—'a form of social understanding embedded in policy action that elucidates how certain forms of technoscience and political order are coproduced' (Tidwell and Smith 2015: 689, 690), overlapping with a particular *security imaginary*—'a structure of well-established meanings and social relations out of which representations about the world of international relations are created' (Weldes 1999: 10).

If we define 'energy security' as 'low vulnerability of vital energy systems', how can we then explain the apparent divergence in understandings and perspectives across the EU? What we are interested in is which systems are perceived as vital (or most vital, and worth protecting more than other and at a higher cost) and how are vulnerabilities perceived—between actors and in relation to objective risks and resilience levels

associated with particular energy systems. Cherp and Jewell hint that the application of *securitisation theory* to energy as seen through the lens of vital energy systems 'offers promising avenues of future research' (2014: 419; also Ciută 2010: 125), a call to which this volume tries to respond.

This book is divided into two parts, reflecting an *inward* and *outward*-oriented gaze on European energy security. In both, the authors seek to understand the divergence in perspectives and understandings of energy security challenges—either between EU member states or in multilateral relationships between the EU as a whole, its different members and external actors.

The first part develops a theoretical framework for the study of energy security debates, based on the securitisation model proposed by the Copenhagen School, which brings together debates about security with actual decision-making processes (Chap. 2). Barry Buzan and Ole Wæver, the major proponents of the approach, define securitisation as 'the discursive process through which an intersubjective understanding is constructed within a political community to treat something as an existential threat…and to enable a call for urgent and exceptional measures to deal with the threat' (Buzan and Wæver 2003: 491).

The concept of securitisation enables an analysis of the way energy becomes a security problem—where, how and why it does. Importantly, energy security, as we will argue (especially in Chap. 6) is not always securitised. In fact—it quite rarely is. The Copenhagen Schools' securitisation model is also providing us with a framework for categorising and comparing perception and identification of *threats* (a subjective component of vulnerabilities), *referent objects* to be protected (values and vital systems) and the policy implication in form of (at times extra-ordinary) measures.

Based on this approach, the book's first part focusses on the analysis of two important EU Member States—Germany and Poland. This selection of cases helps to highlight several important division lines within the EU but also to problematise these easy distinctions. Many studies emphasise the prevailing differences between 'old' and 'new' EU Member States regarding their understanding of energy security and the necessity and range of a common energy policy (Austvik 2016). This is especially true for the relationship towards the

EU's single largest source of gas supplies, Russia. Moreover, with Poland and Germany, the analysis covers two countries that have confronted the EU with considerable challenges. Poland has been enthusiastically embracing the development of shale gas, which has raised noticeable concerns in other member countries regarding possible environmental problems caused by this new technology. Germany's *Energiewende* (i.e. the phasing out of nuclear energy and rapidly expanding renewables) causes not only problems for the country itself but also for the EU, as this change in Germany's energy balance might endanger the EU's climate goals and destabilise grids. Thus, these two cases offer a very interesting analytical setup, as they visibly differ in all energy sectors that we analyse. The analysis will, on the one hand, focus on debates of key audiences, namely political elites, business elites, epistemic communities and the general public (covered through mass media reporting), on the domestic, bilateral and EU arenas. On the other hand, it will examine decision-making processes in politics and business. The approach in the analysis that follows departs from the assumption that divergences in energy security perceptions are a key explanatory factor for the slow progress in establishing a common, integrated and harmonised EU energy policy.

Although the securitisation approach comes from a theory which aims to bridge the divide between neo-realist analysis of 'hard' facts and the constructivist focus on perceptions and interpretations, actual research is still firmly positioned on either side of the divide. As Cherp and Jewell state, 'there is virtually no research on the interaction between the scientific analysis of vulnerabilities of energy systems and policy narratives about risks and response capacities. At the same time, such narratives are often used in both setting the agenda of energy security research and interpreting the results' (2011: 210). This assessment is also true for Poland and Germany. For both countries, there is a substantial body of literature examining the energy sector and challenges to energy security. However, research on related debates is much rarer and is in most cases limited to a mere summary of the positions of key stakeholders, commonly in think tank publications. Where there is a reference to the concept of securitisation, it is often as a catchword (Nyman and Zeng 2016; Nyman 2013; Özcan 2013). Where there is a reference to Poland or Germany, it is in the context of EU-Russian energy relations (Khrushcheva 2011; Judge and Maltby 2017; Zeniewski 2011).

The book's second part departs from precisely the latter issue. It asks about the assumptions regarding energy security that are linked to the relationship of the EU with the 'outer world'. Zooming out from the focus on energy systems bounded by sectors/resources and national borders, the chapters in this part work on a regional scale. These contributions do not share a common theoretical framework, although they all refer to vulnerabilities of EU's vital energy systems. What does unite them is the push to problematise important 'truths' in energy security studies and provide a critical perspective—though the meaning of 'critical' varies between these pieces, ranging from International Political Economy to postmodern 'new security studies'. These approaches can thus be seen as 'critical' in a broad sense, not limited to critical theoretic and normative approaches but rather used as a label to describe all possible challenges to the prevailing 'wisdom' in the policy and public debates

5 Book Structure and Overview of the Chapters

The following Chap. 2 by Andreas Heinrich and Kacper Szulecki lays out the theoretical framework for this analysis. Drawing on Buzan et al. (1998)—central to the so-called Copenhagen School in Security Studies—the chapter proposes a way of applying the classic formulation of the securitisation model to energy security. Signalling some important critique that the Copenhagen School model picked up over the last two decades, the authors propose some reformulations. This proves necessary, as 'securitisation theory' does not provide clear guidance for empirical research (Stritzel 2007). Most importantly, *extra-ordinary measures* which should result from a securitising move—and so, the changes in political practice going beyond what is usually accepted—are specified in a way which enables empirical research of securitisation in the energy sector. Furthermore, they expand the idea of a security speech act and shift the focus onto securitised discourses rather than individual utterances. Finally, they delineate 'securitisation proper' from similar notions of *riskification* (Corry 2012), *security jargon* and draw a (de)securitisation

'pendulum', which can move from *de-politicisation*, through *politicisation* to *securitisation* (Fig. 2.1.). The authors operationalise the relevant aspects of the theoretical approach and put forth a multi-method approach for data gathering and data analysis, which was the basis for the research on which Chaps. 3, 4 and 5 report.

The empirical triptych that follows presents the findings of the research project 'Towards a common European energy policy? Energy security debates in Poland and Germany'—a comparative study of these two EU Member States across three energy sectors. This last element is important and breaks new ground, as previously energy securitisation studies were conducted either at a very general level or focussed on particular domestic case studies. The logic behind this research project was that energy securitisation is context-dependent and might have very different dynamics in different energy sectors—constituting separate 'vital energy systems' in Cherp and Jewell's (2014) parlance.

In Chap. 3, Andreas Heinrich compares the German and Polish debates in the natural gas sector around its transmission infrastructure—focussing on the case of the Nord Stream pipeline under the Baltic Sea. Through that example, he compares the securitisation of transnational energy infrastructures in both countries, and the Nord Stream is arguably one of the most controversial energy issues in German-Polish relations. Scrutinising the national debates about the project, Heinrich examines the kind of security debates that have occurred, what risk and threat perceptions exist, and the nature of the counter-measures that have been proposed in Poland and Germany. While the debate on the Polish side was emotional and rich in historical references, political risk/threat perceptions did not dominate the debate. They did, however, dominate the much more sober German debate. The most surprising result of the analysis has been that full 'securitising moves' are quite rare. It was 'security jargon', that is, threat-based security language that does not offer any solutions and counter-measures, which dominated the Nord Stream debate in the Polish Parliament. At the same time, 'riskification', the more sober analysis of the problem and search for solutions, dominated the German debate in general and was also more common in the Polish media debate.

The following Chap. 4 by Aleksandra Lis compares shale gas debates in Poland and Germany. The analysis shows that an important part of shale politics has involved the production of knowledge on the relation between the shale gas extraction processes and the environment. Two different modes of knowledge production informed the debates in Poland and Germany. In Poland, the Polish Geological Institute conducted empirical measurements of environmental impacts in seven locations, where companies drilled for shale gas. In Germany, ExxonMobil set up an expert panel which modelled the worst-case scenarios of hypothetical drilling. Knowledge produced in these methodologically different ways served to underpin different political moves around shale gas: in Poland it led to securitisation and in Germany to riskification. However, in the Polish case, it was also used by political actors to prevent riskification of the shale gas issue taking place at the EU level.

In Chap. 5, Kacper Szulecki and Julia Kusznir look at the electricity sector, which is very rarely the object of interest in security studies and political science, despite its clear importance as a vital energy sector sustaining vital functions and values of (post)modern societies. They trace security debates in two sub-sectors—renewables and nuclear energy. In Poland, renewables were often framed as a threat for the electricity system. The German debate, less securitised, seems to be closer to the 'objective' systemic vulnerabilities, whereas in Poland the major vulnerability of the power sector—a weak and inadequate grid—remains a non-issue. An instrumental use of securitisation and security jargon is visible among pro-renewable environmental activist in both countries, who mimic the securitising moves known from the gas sector to portray renewables as a solution to national security problems. Debates around nuclear energy resemble those around shale gas in Chap. 4, where German riskification of nuclear reactor operation is met in Poland with arguments about energy independence and national security. In the nuclear sector, the authors also find the strongest example of a successful and full securitising move, with the announcement of the nuclear project as a national security issue, followed by proposed and implemented extra-ordinary measures. The analysis also shows that, especially in the Polish case, politicians are more prone to use and accept security jargon, while technical experts in energy are most active in desecuritisation, even of such serious and problematic

issues as uncontrolled electricity flows. The more international the energy issue, the more likely it is to see spillovers from foreign policy and securitising moves drawing on a broader 'security imaginary'.

In Chap. 6, two scholars working at the forefront of energy securitisation studies—Andrew Judge and Tomas Maltby, as well as the book's editor, draw broader theoretical and methodological conclusions from the experience and findings of the empirical chapters. They identify some key areas for future research on energy securitisation through both an examination of what securitisation studies could learn from the study of energy issues, and what insights could be drawn from theoretical developments within securitisation studies for the study of energy security. After a brief overview of the strengths and weaknesses of the Copenhagen School framework, as illustrated by the empirical Chaps. 3, 4 and 5, they outline several possibilities within two main strands of research: the discursive construction of energy security and the process of energy securitisation. In the case of the former, future research should focus on the question of whether or not energy is a distinct 'sector' of security, and whether it is constituted by 'logics' of security that depart from the Copenhagen School's conception of securitisation. In the case of the latter, they suggest that greater attention should be paid to the audience's energy securitisation attempts and the ways in which such attempts are shaped by power relations, systems of energy governance and the materiality of energy systems.

Chapter 7 by Kacper Szulecki and Kirsten Westphal opens Part II of the book, which focusses on the way energy security is perceived in the relationship of the European Union with its external environment—energy-exporting states, especially Russia, Norway, and the Middle Eastern and North African (MENA) countries. The authors provide a very broad overview of different energy policy and energy security issues that Europe faces, and those for which it needs to prepare itself in the future. Referring back to an article written several years ago, on the onset of the Ukraine crisis (Szulecki and Westphal 2014), they ask whether EU energy governance has gained a new sense of direction since then. They argue that the Ukraine crisis was a moment of political *bombshell* for European energy governance, but it is yet to be seen whether that challenge has been turned into opportunity or, to the contrary, will we see a deepening of the existing rifts and

further fragmentation? Can we see a new idea for balancing the 'energy triangle' emerging, and what is the understanding of energy security driving it? The authors sketch the increasingly fluid geopolitical environment and the global challenges, which European energy policy has to address: shifting demand, the problem of energy access and changing global energy governance architecture. They then turn to internal hindrances of effective external energy policy, highlighting a split over economic efficiency, divergent climate policy ambitions, and the tension between market-oriented and statist energy policy approaches. The chapter concludes with a strong argument for streamlining energy and climate policy, as well as energy sustainability and security, in a longer-term EU energy strategy framework that seems to be emerging. The authors also emphasise the need for an approach to energy security moving beyond supply security.

Though the remaining chapters in this part of the book do not share a common theoretical framework, they are all informed by approaches to energy security, which can be broadly described as critical and as questioning many established truths and orthodoxies of (international) energy politics and energy security studies. Chapter 8 by Irina Kustova takes on the widespread assumption that a choice of market reforms presupposes a desecuritised path of energy policies. She argues that market liberalisation is neither a necessary nor a sufficient condition for the energy politics' desecuritisation or 'normalisation'. Linking a particular type of energy market governance ('market liberalisation') with (de)securitisation processes requires the analysis of case-specific conditions, where tendencies for either securitisation or desecuritisation could prevail. These conditions include, according to Kustova: the compatibility of domestic institutional models of the energy sector, and the 'non-strategic' socio-economic role of resources, which reflects actors' perceptions about their importance for states' economy, security and policies. In this regard, this author understands market liberalisation as a specific institutional model of domestic energy markets ('domestic liberalisation') and as a specific mode of international energy governance ('international liberalisation'), both of which comprise a set of rules, perceptions and ideas. By subjecting the concepts of liberalisation and (de)securitisation to greater scrutiny, the chapter demonstrates that no deterministic and linear relationship between the two exists.

In Chap. 9, Jakub Godzimirski and Zuzanna Nowak examine how the European Union can exert its market and regulatory power in its relations with the key external suppliers of energy. The focus is on the EU's instrumental toolbox and how various policy instruments have been used in relations with main suppliers of gas to the Union. Due to the centrality of Norway and Russia as external gas suppliers and their different ways of relating to the EU in formal and regulatory terms, the chapter focusses on the impact the EU market and regulatory power has had on the operations of these two actors. In this way, the authors show that these two suppliers, usually portrayed as very different trade partners for the EU, can be analysed with one conceptual framework. What differs, the analysis seems to show, is not only their internal characteristics (liberal democracy and an illiberal plutocratic regime) and their actual behaviour but also the way the EU itself approaches them and creates different kinds of interactive policy settings. The chapter also presents some general conclusions on the effectiveness of the EU's use of various policy instruments in relations with external suppliers of energy.

Marco Siddi, in Chap. 10, returns to the concept of securitisation, but this time takes the EU-wide debate as a departure point. European discourses, he observes, resonating the findings of Part I, increasingly frame the EU-Russia gas trade as a security issue. The securitisation of the topic is particularly strong in East-Central European countries. The chapter applies realist and social constructivist theory to examine the securitisation of energy discourses. Siddi finds that realist theory, relying solely on material power factors, does not provide a satisfactory explanation because most of the alleged threats to EU energy security are constructed discursively, and they are not based on actual vulnerabilities. Instead of a classic securitisation analysis, however, he turns to a social constructivist approach, arguing that identities play an important role in this process. The Ukraine conflict has strengthened perceptions of Russia as a threatening Other, which were deeply rooted especially in the national identities of East-Central European countries. This has affected perceptions of energy trade too, which has thus become the subject of acrimonious political contestation.

In Chap. 11, Paulina Landry applies a consequentialist approach to energy, bringing cutting-edge insights from critical security studies and

computer sciences together to generate a novel conceptual framework for studying EU natural gas policy and governance. She differentiates between positive and negative security models. By advancing an argument for the consequentialist nature of gas security, Landry criticises the EU policy's prevailing focus on technical aspects of gas security and on developing a negative security model while not adequately considering the role the individual user plays in the gas system and how gas consumers create positive gas security for Europe. Also, gas security is almost exclusively viewed as a matter of securing natural gas supplies, while its definition should also include biomass and other alternative gas supply sources that comply with and support the sustainable fuels strategy in Europe. Landry demonstrates that the EU gas policy in its current shape does not constitute a sufficient solution for the maintenance of gas security in Europe, although there have been several advancements towards changing this situation that include the recent proposal on the governance of the Energy Union. As regards the positive gas security, the chapter concludes that this model requires further advancement and a stronger regulation that would underpin it in the EU energy policy. The final point is that the Energy Union governance process is crucial to maintenance of gas security in Europe, since it constitutes the necessary conditions for the future enhancement of both the negative and positive gas security models.

Turning away from gas and electricity towards the world's most established strategic resource—oil—Dag Harald Claes, in Chap. 12, refines the concept of energy security into physical, economic and political components, which contain both structural and strategic elements. He then provides a historical account, going back to the early twentieth century, of how the European Great Powers, and later the European Union, have followed various strategies in order to secure oil supplies from external sources. The challenges facing the EU in this endeavour are discussed further in relation to the 'Peak Oil' debate, which seems dubious in Claes' account, and the import dependency of EU member states. This is followed by a critical assessment of the EU's ability to act coherently and effectively in the political diplomacy of the global oil market.

The conclusion then tries to bring all important threads of the book together and sketch some directions for further critically minded research on European energy security.

Notes

1. The meanings of the verb include: to make certain; ensure; to guarantee; to get possession of; acquire; to bring about as well as to protect from danger or risk. Compare my take on the matter with Bridge's thesis that 'energy security' implies a 'securitisation of energy' which 'normalizes certain practices of resource use, and establishes grounds for intervention' (2015: 328 and 336).
2. While 'energy security' is not reducible to 'supply security', this is not to say that 'security of demand' should necessarily be integrated into the definition. That is something that many scholars (Austvik 2016; Brauch 2015; Cao and Bluth 2013; Reddy 2015) and especially energy-exporting states emphasise. There are, however, good reasons not to treat 'demand security' as a necessary element of energy security—leaving it rather to international trade.
3. The by now canonical least of features 'making a concept good' in the social sciences is provided by Gerring (2011): (1) familiarity, (2) resonance, (3) parsimony, (4) coherence, (5) differentiation, (6) depth, (7) theoretical utility and (8) field utility.
4. An earlier definition, similar to the one proposed by Cherp and Jewell (2014) was developed in the Global Energy Assessment by, among others, these authors, as 'uninterrupted provision of vital energy *services*' (my italics). This availability-based and consumption-centred definition is something mid-way between a conventional and an analytical one. See: Cherp et al. (2012).
5. They themselves speak of an 'interdisciplinary Energy security studies'.
6. As a matter of fact, this contextualised meaning of energy and energy security was already present in Yergin's (1988) approach, but few scholars noted the latter part of his definition: 'major national and objectives'.

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Part I

Internal EU Dynamics of Energy Securitisation: Divergent Perceptions

2

Energy Securitisation: Applying the Copenhagen School's Framework to Energy

Andreas Heinrich and Kacper Szulecki

1 Introduction

As the previous chapter has emphasised, energy security is a deeply political concept shaped by factors beyond the materiality of energy systems (Cherp and Jewell 2014: 419). It is clear that in looking at energy security from the perspective of 'vital systems' (Collier and Lakoff 2015), the perception of that 'vitality' will vary between contexts. Some communities (e.g., countries) will put a greater emphasis on certain systems, either due to their objective importance for the economy and society, because of path dependencies, or due to the way they are constructed as impor-

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tant and presented as such in political debates. In consequence, the way the 'vulnerabilities' of these energy systems are seen is in itself relational and should be analysed interpretively (Szulecki 2016). Thus, energy security, like security in general, cannot be analysed only as an objective condition but is better understood as an intersubjective, relational phenomenon (Buzan 1991: 187; Lipschutz 1995b: 213). In this chapter, we introduce the theoretical framework of energy securitisation as a means for the empirical analysis of the social construction of 'vulnerabilities' as 'threats' and 'risks', keeping in mind that in analysing these we need to 'take into account the actors' history, identities, and strategic myths' (Ciută 2010: 317).

For the so-called Copenhagen School, one of the leading constructivist approaches to security studies, the meaning of security lies within the *security discourse*. Within this approach, security is considered the outcome of specific social processes in which issues intersubjectively become security issues through speech acts. Thus, security is a social construction, a self-referential social practice produced in discursive interaction (Buzan et al. 1998: 204). 'Conceptualisations of security – from which follow policy and practice – are to be found in *discourse of security*. These are neither strictly objective assessments nor analytical constructs of threats, but rather the products of historical structures and processes, of struggles for power within the state, of conflicts between the societal groupings that inhabit states and the interests that besiege them. Hence, there are not only struggles over security among *nations*, but also struggles over security among *notions*' (Lipschutz 1995a: 8, emphasis in the original).

This chapter introduces the common theoretical framework for the three empirical chapters that follow. Our starting point was a somewhat revised version of the securitisation approach developed by the Copenhagen School, supported by the concepts of 'riskification' and 'security jargon', which are operationalised in the sections that follow.

2 Securitisation

It was Ole Wæver who first introduced the concept of 'securitisation' (1995), later elaborated in more detail together with Barry Buzan and Jaap de Wilde (Buzan et al. 1998) in the presently 'canonical' form, making the concept a centrepiece of the so-called Copenhagen School's approach. Weaver's entry point was critical of both the political and the academic treatment of 'security', which he perceived as doubly problematic: first, in the way security is portrayed as something having a real existence irrespective of political discussions, and secondly, being inherently a 'good thing', with security maximisation as a naturalised policy goal (cf. Wæver 1989). The Copenhagen School was thus advancing a new approach to security on ontological, epistemological and political grounds. Security is not an objective thing—it comes into being through speech—and thus the utterance is its primary reality. It exists intersubjectively as a mode in which we understand a particular element of the world. In consequence, the study of security requires a move towards interpretive and reflexive methodologies that do not draw the problematic dualist distinction between the observer and the reality 'out there'. Finally, the underlying value commitment of securitisation studies is the problematisation of instances where security is invoked, understanding that speech acts have a purpose and securitisation, as the Cold War era has shown, can be a means of limiting (democratic) political oversight.

Buzan and Wæver define securitisation as 'the discursive process through which an intersubjective understanding is constructed within a political community to treat something as an existential threat […] and to enable a call for urgent and exceptional measures to deal with the threat' (2003: 491). Securitisation presents a linear and dynamic mechanism of security construction and consists of several major components. In a first step, a *securitising actor* constructs a *referent object* and *threat narrative* claiming the existence of an *existential threat* to the survival of this referent object. This narrative of existential threat is then presented by the securitising actor via *speech act* to an *audience* recommending extra-ordinary *emergency measures* which would break the 'normal' rules

of the game (e.g., of the political process) for reasons of security. This process so far is called a securitising move. If in a final step the audience accepts this move (audience acceptance), securitisation is successfully completed (Buzan et al. 1998: 25, 31; Buzan and Wæver 2003: 71). This ideal typical model was our departure point in the analysis of energy securitisation.

As our project has been examining how discrepancies between European Union (EU) member states' understanding and articulation of 'energy security' impede the development of a common European energy policy, only the first step of securitisation, the securitising move, has been relevant. The core elements of a securitising move are the referent object, the securitising actor(s), the extra-ordinary measures and the security speech act.[1]

Referent objects are things that are considered to be existentially threatened and that have a legitimate claim to survive. The threats to their survival can be viewed similarly to vulnerabilities of vital energy systems, that is, a combination of their exposure to risks and their resilience (ability to withstand disruptions) (Cherp and Jewell 2014). Referent objects/vital energy systems and their vulnerabilities reflect an interplay between material factors and actors' interpretation. 'In practice, securitizing actors can attempt to construct anything as a referent object' (Buzan et al. 1998: 36). The constitution of a referent object involves the construction of identity by creating a community via the exclusion of others (Wæver 2003: 18; Behnke 2007: 109–110). This implies that securitisation happens in a broader discursive space, where commonplace or intersubjective structures of meaning such as 'security imaginaries' (Weldes 1999; Guzzini 2012) and national identities are called up to (de)legitimise particular moves.

A securitising actor is an individual, or a group, who performs the security speech act, who securitises issues by declaring a referent object existentially threatened (Buzan et al. 1998: 36). No one is excluded from attempts to articulate alternative interpretations of security. But as the relationship among actors is not equal or symmetrical, the possibility for a widely visible and recognised securitising move and, thus, ultimately successful securitisation varies dramatically with the social position held by the actor.

Even though different actors might compete in the field of security, state actors are generally privileged by being more widely accepted voices on security matters, by having the power to define security (Buzan et al. 1998: 31, 37; Salter 2008: 331). This fact makes security very much a structured field (in the sense of Pierre Bourdieu). However, non-state actors (individuals or small groups) can utilise security language as well to achieve certain aims, provided they possess sufficient social capital (Vuori 2008: 70, 77). However, these actors 'can seldom establish a wider security legitimacy in their own right. They may speak about security to and of themselves, but few will listen' (Buzan et al. 1998: 36).

Another important element of the securitisation model is the call for extra-ordinary measures characterised by the breaking of the 'rules of the game'. Securitisation 'takes politics beyond the established rules of the game and frames the issue either as a special kind of politics or as above politics' (Buzan et al. 1998: 23). The Copenhagen School remains rather vague regarding the relationship between normal politics and extra-ordinary measures: 'Although in one sense securitisation is a further intensification of politicisation (thus usually making an even stronger role for the state), in another sense it is opposed to politicisation' and it is also presented as 'justifying actions outside the normal bounds of political procedure' (Buzan et al. 1998: 29 and 24, respectively). Taking into account the critical roots of securitisation (see Wæver 1989), as well as the broader discussion on the politics of securitisation (Hansen 2012), we are rather inclined to see securitisation as the opposite of politicisation, not its logical continuation (compare Kustova (Chap. 8), in this volume). To put it again in the terms proposed by Buzan et al., 'politicisation opens up, and securitisation closes down' (1998: 143), meaning that the political mode is that of open contestation, debate and scrutiny, while securitisation (and de-politicisation) implies removing issues from the sphere of what is debatable and allowed to be scrutinised.

Overall, the original securitisation concept focusses on the process of securitising an issue; 'the practice of securitisation is the centre of analysis' (Buzan et al. 1998: 32). Thus, to sum up, any securitising moves require an existential threat, a referent object that is threatened and the proposition of extra-ordinary measures to save to referent object. These three elements are essential for the empirical application of the securitisation theory.

The final element of the securitisation model is the security speech act. For Buzan et al. (1998: 26) '[t]he process of securitisation is what in language theory is called a speech act. It is not interesting as a sign referring to something more real; it is the utterance itself that is the act'. They name three conditions for a successful speech act: (1) the speech act has to follow the internal grammar of security, (2) the securitising actor has to have a position of authority in order to increase the likelihood of the audience accepting the claims made in a securitising move (social capital) and (3) features of the alleged threats that either facilitate or impede securitisation (1998: 33). Conditions 2 and 3 bring in an external, contextual and social component.

However, as we have already pointed out, audience acceptance is beyond the scope of our analysis. What we should therefore be more interested in is the nature of the securitising speech act and its specificity. How do we know a securitising speech act when we see (or hear) it? For Wæver and the Copenhagen School, rooted in security studies and the Cold War experience, this issue did not seem that problematic. It was the very word 'security' that became something similar to a spell—or a mantra chanted by hawkish statesmen and strategic studies experts. As the previous chapter has shown, 'energy security' seems to be something different from 'uttering security in relation to energy'. As Jonna Nyman puts it, while 'energy security is sometimes securitised, it often is not, despite being the subject of consistent security speech-acts by elite actors' (2013: 1). Understanding that already from the onset of our project, we had to find a way to distinguish between instances when the utterance of 'security' is indeed a securitising speech act and those moments when it appears to be something else. We, therefore, expand the original Copenhagen School vocabulary by taking in some of the critical points aimed at the 'canonical' model, most importantly through the notions of 'riskification' and 'security jargon'.

3 Criticism

The Copenhagen School set out to develop 'a comprehensive new framework for security studies' (Buzan et al. 1998: 1). While admittedly securitisation provides a new understanding of and a fresh analytical focus on

security issues, the framework presented by the Copenhagen School is far from comprehensive. Since the mid-1990s, critics have scrutinised various central elements of securitisation 'theory'. In fact, the very nature of these proposals and their status as a theory rather than a *model*, an *ideal type* or a *hypothesis* has also been questioned. Holger Stritzel summarises much of this critique: securitisation theory suffers 'from several internal tensions in the argument, an often too vague and undertheorised terminology and, in general, the fact that too much weight is put on the semantic side of the speech act articulation at the expense of its social and linguistic relatedness and sequentiality' (2007: 358).

Most critics argue for a more systematic and clearer conceptualisation of securitisation theory and clear guidance for empirical research. For our research, the following points of criticism are most relevant:

- The definition of extra-ordinary measures.
- The overemphasis on linguistic speech act methodology.

3.1 Extra-ordinary Measures

The Copenhagen School defines extra-ordinary measures as breaking the rules that otherwise bind. Thereby, an issue is elevated from the normal political process in order to legitimise otherwise disputable policies. As the breaking of rules (or at least the proposition of this procedure) is of the utmost importance for the theory, the question has been raised if there can be security (or securitisation) in the absence of a call for exceptional measures and/or the breaking of rules (Hansen 2000: 300; Ciută 2009: 312, 313). Can securitisation occur in the normal political process? The understanding of 'extra-ordinary measures' and the border between normal politics and some 'securitised' sphere has been contested. Jörn Richert suggests that 'in its current form, the framework ignores securitizing moves – even if they result in referent objects conceived as being existentially threatened, and even if this insight provokes political action – as long as the occurring action does not break the rules that otherwise bind' or intend to break them (2010: 12). This would exclude from the analysis measures that do not leave the 'normal' political process and are still embedded in the process of politicisation (Richert 2010: 11).

Empirical evidence, however, has shown that most securitising attempts (especially in the environmental and energy sector) have ended in measures that are 'part of ordinary politics' (cf. Wæver 1996, 2007; Richert 2010; Mulligan 2010; Besson and McDonald 2011; Rogers-Hayden et al. 2011; Fischhendler and Katz 2013: 332).[2] 'The disjuncture between the securitised rhetoric and actual practices […] indicates either a failure of the securitisation process or a failure of securitisation theory to account for what evoking "security" accomplishes' (Watson 2011: 2; see also Hansen 2000: 305). Thus, the rather extreme conditional conceptualisation of securitisation limits the theory's empirical applicability (with the exception of military matters including terrorism) as 'extra-ordinary measures' rarely bypass 'normal' procedures (Sjöstedt 2008: 10).

Wæver (2003: 27) concedes that it might be helpful 'if the criteria to apply in specific instances is less the extra-ordinary nature of particular measures (because hard to make precise) but rather the threat construction as such and the argument about necessity. The extra-ordinary measures cannot be left out of the theory, but the focus of empirical investigations should be on the rhetorical structure of statements more than on institutional history of particular measures'. Mark Salter (2011: 121) claims that 'ordinary measures', which do not break the rules of the normal political process, also qualify for a securitising move as long as there is some public policy change, either in discourse, budget or in actual policy, such as the granting of new or emergency executive powers (see also Zittoun 2015). In a similar vein, Caroline Kuzemko (2014: 260) understands extra-ordinary measures 'to break with previous political practice'. Nyman's claim that in the energy sector, 'emergency measures are rarely possible' (2013), equating these with military measures (e.g., the invasion of Iraq), can easily be challenged. Following the suggestion made by Wæver and others, one can in fact expect 'extra-ordinary measures' to be quite common in the energy sector because energy has a long tradition of technocratic governance detached from public scrutiny or even awareness.

Paraphrasing Carl Schmitt (1985 [1922]) who stated that 'sovereign is he who decides on the exception'—governments, companies or other relevant actors exercise sovereignty in that issue area by deciding over its exception from regular policymaking. Giorgio Agamben (2005) concep-

tualised the 'state of exception' as a particular paradigm of government. Drawing on both Agamben and Schmitt allows us to understand what these special measures of 'exception' may imply in political processes and what that means for the image of politics underpinning securitisation theory (Wæver 2015; Hansen 2012). Narrowing down 'emergency measures' and 'exceptional means' to military interventions excludes most of what might be interesting in energy securitisation if we were to move beyond the narrow classic focus on the international politics of oil procurement. If 'extra-ordinary measures' and 'exceptional politics' mean the removal of energy issues from public oversight, the securitisation model gains a political/normative edge which is especially interesting. Who should be exercising power and governing the energy sector? To what extent is securitisation—and expert insulation—of energy security acceptable?

Itay Fischhendler (2015: 248–249) emphasises organisational und institutional change such as concrete infrastructures that aim to protect the referent object or institutional mechanisms to counter perceived threats (e.g., special representatives or committees, exclusion of public stakeholders from governance, civilian disengagement). 'This [break with previous political practice] at once both reduces government responsibility for policy while also leaving it less subject to political discretions, deliberations and interventions' (Kuzemko 2014: 261).

With these clarifications in mind, in the empirical case studies presented in the following chapters, we have been trying to identify how 'extra-ordinary measures' proposed by the securitising actors have aimed at rupturing regular political practices, strengthening executive powers of selected agencies or insulating some decisions and potentially important information from public access. This is based on an understanding of energy policy as a public policy, where transparency, rule of law and democratic oversight are important values and where societal welfare is the ultimate governance goal. These three kinds of 'extra-ordinary measures'—(1) breaking norms (that is, explicit or implicit prescriptions about 'how things are done'), (2) shifting competences and power (towards the executive) and (3) withholding or limiting information—do not have to occur together. Any of these in our analysis qualifies as 'extra-ordinary measures' if it is legitimised by reference to security.

3.2 Speech Act

Criticism has been voiced against the methodological groundings of securitisation in linguistic speech act theory (cf. Balzacq 2008, 2011a, b; Stritzel 2007; Curley and Herington 2010), arguing that 'too much weight is put on the semantic side of the speech act articulation at the expense of its social and linguistic relatedness and sequentiality' (Stritzel 2007: 358).

The strong focus on the specific speech act limits itself to a purely linguistic analysis (excluding images, etc.) and leads to actor-centrism, while the structure (i.e., the social context of what can be spoken), the core rules for authority/knowledge (who can speak) and the degree of success (what is heard) are underdeveloped in securitisation theory (Stritzel 2007: 373; Salter 2008: 322; Curley and Herington 2010: 145). In practice, there are seldom simple securitising moves but rather a complex play of competing authorities, power metrics and discourses (Salter 2008: 322).

The sole focus on language has been criticised as it excludes images and forms of bureaucratic practices, institutional mechanisms and infrastructures or physical actions (cf. e.g., Hansen 2000; Bigo 2002; Williams 2003: 524; Huysmans 2006; McDonald 2008: 568–569, 576; Fischhendler 2015: 248–249). Several authors argue for a wider and more reflective range of forms through which meaning can be communicated (McDonald 2008: 569) because the 'conditions of the production and reception of communicative acts are influenced fundamentally by the medium through which they are transmitted' (Williams 2003: 526).

The reliance on speech act theory produces a static model of securitisation that 'does not match the complexity of contemporary social dynamics of security' (Salter 2008: 324). The speech act theory is too narrow, reducing social phenomena to certain textual makers, and thereby failing to address discursive practices and the existence of security outside the speech act.

The model defines security as survival in the face of an existential threat, a distinctly inflexible definition. Security has a general meaning independent of its context; securitisation theory rules out the notion that the meaning of security can vary contextually (Wæver 2003: 9, FN 33).

However, as what constitutes an existential threat can change (Ciută 2009: 307–308), security is 'conceptualised and politically practised differently in different places and at different times' (Bubandt 2005: 291). The model neglects the temporary dimension by assuming that securitising actor(s) and audience(s) remain unchanged over time, whatever the context, and that the securitised issue does not develop either (Abrahamson 2005: 59; Salter 2008: 324; Ciută 2009: 303; Balzacq 2011a: 7). The static model also does not take into account that securitisation is not an instantaneous or irrevocable act as every security issue tends towards politicisation over time for considerable resources have to be spent in order for a threat or a danger to remain present in political discourse (Salter 2011: 120–121).

However, as security is the product of historical structures and processes of power struggles between societal groups with competing interests, the context (the historical and social structures) is important (Lipschutz 1995a: 8). Wæver (2003: 28) grants that extending the speech act logic is possible. This view is supported by other authors who believe that 'supplementary concepts—such as non-verbal forms of political communication—do not pose a methodological challenge to the fundamental concept of securitisation *per se*' (Curley and Herington 2010: 145). They propose a more complex, sociological methodology of analysing the process of securitisation, including discursive practices, context and power relations that are considered important to explain the emergence and origin of security problems (Stritzel 2007; Vaughn 2009: 279; Salter 2011: 118; Balzacq 2011a; Huysmans 2011: 372).

Some simple methodological adjustments can mitigate the aforementioned shortcomings of securitisation theory by extending the focus towards the discourses in which the securitising speech act takes places. Discourse analysis, which relies heavily on speech acts, in that it is based on the premise that an utterance is the basic unit of communication (Schiffrin 1994: 90), provides a more comprehensive picture. Stefano Guzzini (2011: 331, 335) sees that already included in the original concept; he stresses the procedural character of securitisation and security speech acts. 'Only in its most legal sense can security be empirically conceived as a "speech act" in terms of a single event […]. Hence, the idea of a speech act refers here to a process, not a kind of single bombshell event' (Guzzini 2011: 335).

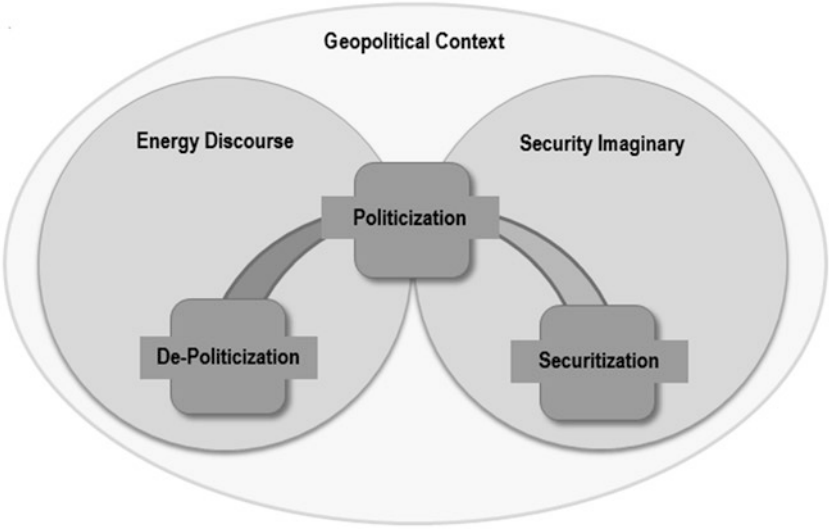

Fig. 2.1 The "pendulum" of (de-)securitisation and (de-)politicisation in energy policy

Discourse analysis can be seen as a methodological tool allowing to tap into the intersubjective structures of meaning that surround and condition an individual speech act. We should also understand that securitisation is ultimately about creating a certain kind of semantic tension by moving an issue from one area to another, by drawing on one discourse (security) to reposition elements otherwise associated with a different discourse (here: energy). Figure 2.1 illustrates how the pendulum of (de-) securitisation and (de-)politicisation moves in relation to these broader structures.[3]

4 Résumé and Revision

The critique of securitisation theory has not been fundamental but rather constructive in order to widen its appeal and range. First, instead of constraining the approach by insisting on single security speech acts, the approach is opened for the analysis of contextual factors by using discourse analysis.

Second, the definition of extra-ordinary measures as a central part of securitisation model has to be improved. These measures should include the breaking with previous political practice and the business-as-usual habit leading to policy change, either in discourse, budget or in actual policy as well as organisational and institutional change. Earlier, we have identified the three broad categories of these extra-ordinary measures: breaking of/with norms guiding political practice, shifting power, and competences and constraining access to information. However, to identify such measures as 'extra-ordinary' it requires detailed knowledge about the usual habit, the practices and ways of doing things in politics in order to spot the unusual.

In Germany, for instance, the *Energiewende* (i.e., the energy transformation involving the decision to phase out nuclear energy) can be considered as an extra-ordinary measure because it was finally put into practice by a conservative CDU-led government after it had reversed an earlier decision by the previous social democratic SPD-led government to that effect. It was a complete political turnaround for the CDU, which had strongly opposed the phasing out of nuclear energy before, triggered by the accident in the Japanese nuclear power plant of Fukushima in 2011.

In a similar vein, the construction of the Polish liquefied natural gas (LNG) terminal at the Baltic Sea can also be seen as an extra-ordinary measure. Its construction was initiated by a conservative government and the liberal successor government did not, as it has been usual practice in Poland after the government changed hands between the two political camps, reverse that decision. In this sense, somewhat counterintuitively, continuity in energy policy can be interpreted as extra-ordinary and breaking with the practice of Polish post-1989 politics.

Besides the aforementioned problems with extra-ordinary measures, empirical evidence also shows that security references are often not associated with any existential threat and/or that the referent object is not specified (Fischhendler and Katz 2013: 334; see Heinrich's chapter (Chap. 3) in this volume). Abrahamson (2005: 59) describes securitisation as a gradual process moving from normal politics to extra-ordinary measures: 'The process of securitisation is thus better understood as gradual and incremental, and importantly an issue can be placed on the secu-

rity continuum without necessarily ever reaching the category of existential threat' (see also Vuori 2008: 72; Salter 2011: 119; Stetter et al. 2011: 445). For Williams (2011: 218) '[t]he concept of intensification [of unease, risk, and emergency] may hold some promise as a means of moving beyond the division between exceptional and normal politics that pragmatic approaches see as a key problem in securitisation theory'.

However, trying to resolve the division between exceptional and normal politics within the securitisation approach would dilute it as an analytical tool; it is rather necessary to employ an additional concept in order to deal with *non-existential threats*, *unspecified referent objects* and other deviations from the securitisation model as proposed by Buzan, Wæver and de Wilde.

4.1 Riskification

Olaf Corry (2012) introduces the concept of risk politics (riskification) which he considers distinctly different from securitisation. Threats and risks are similarly considered socially constructed and changeable; however, while threat-based security deals with direct causes of harm, risk-based security is oriented towards the conditions of possibility (or constitutive causes) of harm promoting long-term precautionary governance.

'Appeals to "security" based on risk' Corry writes, 'do not necessarily trigger emergency measures, friend–enemy thinking and militarisation against existential threats' (2012: 238). Riskification decouples security from the idea of an existential threat to a valued referent object leading to exceptional measures against external and ungovernable threatening others. 'Rather, it posits risks (understood as conditions of possibility for harm) to a referent object leading to programmes for permanent changes aimed at reducing vulnerability and boosting governance-capacity of the valued referent object itself' (Corry 2012: 248; compare again with vulnerabilities in Cherp and Jewell 2014). The notion of 'riskification' allows us to analyse security language in cases where issues (of an endangerment of a referent object) are not excluded from the political debate; on the contrary, political debate is instigated and policy proposals are presented (compare Judge and Maltby 2017).

4.2 Security Jargon

The concept of 'security jargon' refers to discourses in which only a security threat is mentioned but no plan for action is advocated for as in the cases of securitisation and riskification. Security language is simply used to communicate a sense of urgency in order to influence a discussion, gain media attention, avoid sceptical counterclaims, etc. (Fischhendler and Katz 2013: 322, 333). Fischhendler (2015: 247) calls that also 'tactical securitisation'; low politics issues are linked with high politics issues of national survival in order to raise the profile of the issue, increase public awareness, mobilise resources, and so on. In such a move, 'security' becomes a rhetorical commonplace to which the actors refer in order to gain legitimacy and the upper hand in rhetorical struggle (cf. Krebs and Jackson 2007; Szulecka and Szulecki 2013). It is not invoked as an ontological claim about the existential threat to the referent object, but rather name-dropped. The notion of 'security jargon' allows us to analyse ritualised rhetorical practices and elements of deeply normalised security discourses which become elements of rather casual debates.

4.3 De-politicisation

Politicisation, or 'normal politics', means that issues are not phrased as existential risks/threats but presented as governable and subject for open discussion and, therefore, entail responsibility (Buzan et al. 1998: 29; Corry 2012: 249). Such discourse aims to propose a '[p]lan of action to maximise utility in trade-offs with other goods' and to legitimise these trade-offs (Corry 2012: 249).

De-politicisation, in a move resembling delegation, means that responsibility for policy-making is shifted away, by a range of tools, mechanisms and institutions, from the government and its institutions to either quasi or wholly independent bodies. This results in lower degrees of political contestation, less active public scrutiny and a decrease in transparency by, for example, a delegation to an epistemic community of experts and/or the use of technical language, specific and often unintelligible to others (Kuzemko 2014: 259; see also Wood 2015: 4). Matthew Flinders and

Jim Buller (2006) distinguish three tactics used to enact de-politicisation: 'institutional' (creating 'independent' agencies), 'rule-based' (creating laws constraining action) and 'preference-shaping' (rhetorically presenting a logic of 'no alternative'). In a similar vein, Kuzemko (2016: 110–113) speaks of marketised, technocratic/institutional and non-deliberative forms of de-politicisation.

This discarding of responsibility for certain policies (i.e., outsourcing of decision-making) also reduces the government's political discretion and its opportunities for interventions (Kuzemko 2014: 261). It establishes 'a more "rules-based" system over which civil servants and politicians have less active day-to-day control […]' (Kuzemko 2016: 109). This reduction of political deliberation might lead to a lack of existing political capacity and technical expertise within the government dedicated to the issue at hand (Kuzemko 2014: 261, 262, 270). With its outsourcing of decision-making, de-politicisation removes an issue from the 'normal' political process and public scrutiny. Looking at the three tactics of de-politicisation proposed by Flinders and Buller, we immediately notice that they bear striking similarity to the three types of extraordinary measures that we have identified in our operationalisation of securitising moves. Rule-based de-politicisation focuses on prescriptions that constrain and guide practice, institutional measures are about shifting competences and power, while preference shaping involves limiting the 'thinkable' by constraining some arguments or information. In many ways, de-politicisation becomes the flip side or a mirror image of securitisation (see also Fig. 2.1, where the downward movement of the 'pendulum' indicates the level of publicness). The difference between these two concepts is the reference to security and lack thereof.

What is important to bear in mind is that de-securitisation is a process through which the urgency of existential threats and the language of security are questioned in order to bring issues back onto the fore of political debate. It should not be conflated with de-politicisation, even though the latter can result from the former—that is, contentious and securitised issues are put under a more technocratic mode of governance in order to reduce tensions but, as a result, remain outside the realm of political contestation.

5 Operationalisation and Method

Given that energy security debates are deeply political and the notion itself is conditioned by factors beyond the materiality of energy systems, we have to approach it as an intersubjective, relational phenomenon rather than just an objective characteristic of the energy system. We chose Copenhagen School's securitisation theory as a theoretical foundation for our research project on energy security debates in Poland and Germany. For this constructivist approach to security studies, the meaning of security lies within the security discourse expressing perceived threats to a referent object. However, inherent ambiguities of the securitisation model, and its lack of clear guidance for empirical research in combination with empirical evidence that deviate from the theoretical framework, pose serious challenges for the project's empirical inquiry into energy security debates.

Therefore, to mitigate these challenges, the original 'canonical' model put forth by Buzan et al. (1998) has been revised with 'riskification' and 'security jargon'—two additional analytical concepts applied to study the topic. These changes and additions enable the case studies that follow in the next chapters to analyse the energy security discourse in Poland and Germany even though much of the material appeals to security without fulfilling the requirements of the strict securitisation model. We believe that these adjustments, drawing on theoretical and methodological critiques discussed earlier, provide a more detailed picture of energy security debates. What we hope was avoided is the unnecessary blunting and banalisation of the concept of securitisation as an analytical tool, which could have occurred had we subsumed every reference to security under the 'securitisation' label.

In his proposals for a more 'sociological' theory of securitisation, Thierry Balzacq (2011b: 35–37) recommends analysing—among others—the securitising actor (who made the claims about the existence of existential threats) and the discursive tools used by the securitising actor to mobilise an audience (metaphors, emotions, stereotypes, etc.). One of these discursive tools are frames. Frames can be defined as the basic cognitive structures that guide the perception and representation of reality

(Gitlin 1980: 6). They are entities larger than one sentence that define problems, diagnose causes, make moral judgements and suggest remedies (Entman 1993: 52).[4] Combining a discourse analytic approach to broader structures of meaning and the rhetorical analysis focussed on frames gives us flexibility in tracing securitising moves across levels of analysis, as both a broader societal process and a mechanism playing out in micro-interactions.

For 'a more credible study of securitisation', Balzacq (2011b: 38) proposed analysing the 'how', 'who' and 'what' of the energy security discourse under study. As outlined before, any securitising move (i.e., the appeal to 'security' based on threat) requires an existential threat, a referent object that is threatened and the proposition of extra-ordinary measures to save the referent object (i.e., a plan to defend). These three elements are essential to identify a securitising move and to distinguish it from riskification or security jargon (Table 2.1).

Riskification on the other hand appeals to 'security' based on risk; therefore, it requires a risk, a referent object at risk and precautionary measures (i.e., a plan to govern). Security jargon appeals to 'security' based on (no clear) existential risk or threat and proposes no precautionary or extra-ordinary measures (i.e., no plan of action).

The concept of de-politicisation does not appeal to 'security' at all; it refers to a governable object that is best dealt with by a shift of responsibility to somebody/something other than the government (e.g., by creating a commission) and specific governance measures (i.e., a plan to govern) such as to analyse and evaluate the issue at hand and to report back to the government.

Our project also followed Balzacq's advice that '[…] to capture the breadth and depth of securitisation processes, the analyst cannot focus on one text, but instead examine various genres of texts, at different points in time, in distinct social contexts' (2011b: 43). Each case study was analysed with the same multi-method approach. The major part of research was a software-based manual quantitative and qualitative content analysis of the full reporting of selected Polish and German mass media on the case studies. Our data collection focussed on print media, with four major national Polish newspapers and five German papers. From over 8,000 hits (most print media articles were retrieved using the online database

Table 2.1 Grammars of security

Language game	De-politicisation (not security based)	Politicisation (normal politics)	'Security jargon'	Riskification (risk politics)	Securitisation (security politics)
Definition/ Grammar	'It argues that responsibility for economic policy making has been passed away, by various means, from government to either quasi or wholly independent bodies resulting in lower degrees of political contestation and less active collective representation of public bodies by majoritarian institutions.' (Kuzemko 2014: 259) A 'process through which the political character of decision making is shifted away from the central state.' (Wood 2015: 4)	'Politicisation means to make an issue appear to be open, a matter of choice, something that is decided upon and that therefore entails responsibility […].' (Buzan et al. 1998: 29) Issues do not have to be 'phrased as threats against we have countermeasures' (Buzan et al. 1998: 29) 'Construction of object as governable (making it distinct, malleable, measurable).' (Corry 2012: 249)	Tactical securitisation means that low politics issues are linked with high politics issues of national survival in order to raise the profile of the issue, increase public awareness, mobilise resources, etc. (Fischhendler 2015: 247) Tactical securitisation: security jargon (no clear threat etc.) (Fischhendler et al. 2016: 162).	'Construction of conditions of possibility of harm (a risk) to a governance-object' (Corry 2012: 249). 'It is argued that risk politics is *not* an instance of securitisation, but something distinct with its own advantages and dangers. Threat-based security deals with *direct causes* of harm, whereas risk-security is oriented towards the conditions of possibility or *constitutive causes* of harm a kind of 'second-order' security politics that promotes long-term precautionary governance' (Corry 2012: 235)	Securitisation is an extreme form of politicisation; it is also opposed to politicisation (Buzan et al. 1998: 23, 29) 'Construction of scenario of direct harm (an existential threat) to a valued referent object' (Corry 2012: 249)

(continued)

Table 2.1 (contined)

Language game	De-politicisation (not security based)	Politicisation (normal politics)	'Security jargon'	Riskification (risk politics)	Securitisation (security politics)
Political imperative	Plan to create quasi or wholly independent bodies or laws constraining government action	'Plan of action to maximise utility in trade-offs with other goods' (Corry 2012: 249)	No plan of action	'Plan of action to increase governance and resilient of referent object' (Corry 2012: 249)	'Plan of action for defence against threat, that is external to referent object' (Corry 2012: 249)
Performative effects	Discard responsibility for certain policies (outsourcing), reduction of contestation, decrease public scrutiny, increase secrecy (e.g., via technical language, delegation to epistemic community of experts)	'Legitimation of trade-offs in relation to other goods' (Corry 2012: 249).	Security jargon as a means to influence a discussion, gain media attention, avoid sceptical counterclaims etc. (Fischhendler and Katz 2013: 322). Security language is used to communicate a sense of urgency (Fischhendler and Katz 2013: 333)	'Legitimation of precautionary measures, i.e. inclusion of a safety margin' (Corry 2012: 249)	'Legitimation of exceptional measures (secrecy, no-holds-barred action, no trade-offs with security) aiming for survival' (Corry 2012: 249)

(continued)

Table 2.1 (contined)

Language game	De-politicisation (not security based)	Politicisation (normal politics)	'Security jargon'	Riskification (risk politics)	Securitisation (security politics)
Empirical indicators	Governable object, shift of responsibility, governance measures (a plan to govern) No appeal to 'security'	Governable object, ordinary measures (plan to optimise) No appeal to 'security'	Existential threat (sometimes diffuse), but no precautionary or extra-ordinary measures (no plan of action) Appeals to 'security' as empty rhetoric	Risk, referent object, precautionary measures (plan to govern) Appeals to 'security' based on risk	Existential threat, referent object, extra-ordinary measures (plan to defend) Appeals to 'security' based on threat

Factiva), after checks by the responsible coders, a total of 1,237 newspaper articles were included in the analysis.[5] This was supported by semi-structured interviews, following a questionnaire prepared by the entire project team, with decision-makers and experts. The interviews were fully transcribed and coded.[6] The last data-gathering method was the desktop analysis of official documents related to the case studies (including transcripts of policy debates from parliamentary databases and policy documents).

Notes

1. Despite its importance for the success of a securitisation move, however, the audience is not among Buzan's et al. (1998: 36) units of analysis. This has been seen as problematic and a weakness of this approach (e.g., Balzacq 2011a). However, the methodological challenges of addressing audience acceptance have been too difficult to tackle in a comparative project like ours. Some of the studies do address the question of acceptance, but this issue has been left to the researchers' discretion.
2. Even Buzan et al. (1998: 179–189) do not mention emergency measures in their case study on EU policy.
3. The notion of a 'security imaginary' draws on Weldes (1999) and Guzzini (2012) and is understood as 'a structure of well-established meanings and social relations out of which representations about the world of international relations are created' (Weldes 1999: 10). This suggests that securitisation, by invoking (most often) national security positions, an issue in an inherently inter-national us-them, Self-Other dyadic frame, even if it occurs in a domestic debate without a clear reference to foreign policy.
4. Entman's definition comes very close to a description of the mechanism of securitisation: 'To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described' (Entman 1993: 52).
5. For a detailed description of the operationalisation of the research project, see 'Documentation of data collection', available at: http://www.forschungsstelle.uni-bremen.de/UserFiles/file/04-Forschung/documentation_data-collection.pdf.

6. No interviews were conducted for the case study on the Nord Stream gas pipeline.

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3

Securitisation in the Gas Sector: Energy Security Debates Concerning the Example of the Nord Stream Pipeline

Andreas Heinrich

1 Introduction

This chapter compares the securitisation of transnational infrastructures in Germany and Poland through the example of the Nord Stream gas pipeline. The pipeline allows for direct natural gas deliveries from Russia to Germany through the Baltic Sea, bypassing the traditional transit countries in Central and Eastern Europe, Poland among them. Thus, its construction is one of the most controversial energy issues in German-Polish relations. It has caused an emotional debate about energy security in Poland and moved an economic infrastructure project into the realms

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of international politics—in the case of transnational gas pipelines, actions by one country are seen as a direct threat by the other. That is why Radosław Sikorski, defence minister of Poland from 2005 to 2007, linked the German-Russian pipeline agreement to the Ribbentrop-Molotov (Hitler-Stalin) Pact.[1]

Scrutinising the national debates about the Nord Stream pipeline, the chapter examines what kind of security debates have taken place, what risk/threat perceptions exist, and what kind of counter-measures have been proposed in Poland and Germany. Since discussions of energy security often move energy policy issues into the realms of strategic national politics, they carry the potential to securitise relations between the countries involved.

The chapter is structured as follows: after a brief description of the Nord Stream pipeline, the methodological approach of the analysis is presented. Then the Polish and German debates about the Nord Stream pipeline are analysed in detail. In a conclusion, the two national debates are compared and linked back to securitisation theory.

2 The Nord Stream Pipeline[2]

The construction of a wide gas pipeline network in the second half of the 1960s enabled the Soviet Union to become the world's largest exporter of natural gas. The centrepieces of this pipeline grid were the pipelines, 'Brotherhood' and 'Northern Lights', which connect Russia with Central Eastern Europe running through Ukraine and Belarus. These export pipelines were complemented by the Yamal-Europe pipeline which was opened in the late 1990s and was built through Belarus and Poland to Germany. However, plans for a second line of the Yamal pipeline (Yamal II) to double its capacity never materialised.

After repeated and protracted conflicts with transit countries on the territory of the former Soviet Union, especially with Ukraine in 2005–2006, 2009 and 2014–2015, which resulted in disruptions of Russian gas supplies to European customers, the diversification of export routes became an important part of Russia's natural gas export strategy.

The first Russian export pipeline to Western Europe which avoids transit countries is the Nord Stream pipeline. This 1,200-kilometre-long pipeline, consisting of two lines with a total capacity of 55 billion cubic metres per year, runs from the Russian town of Vyborg below the Baltic Sea to Ludmin, near Greifswald in Germany. The construction agreement between Gazprom, which, since 2006, has held a legal monopoly on Russian gas exports, and its German partners E.ON Ruhrgas and BASF, was signed in September 2005 with the explicit support of the German and Russian governments. Fierce criticism of the Nord Stream project was voiced primarily by Poland and, to varying extents, by the Baltic States which saw their energy security threatened by a pipeline that would bypass them. Sweden cited concerns for the ecology of the Baltic Sea as major reason for its opposition.[3]

The pipeline began operating at the end of 2011. However, due to the European Union's (EU) legal requirements (i.e., the Third Energy Package) Nord Stream has so far not been able to use its full capacity. This is because the connecting pipelines in Germany are subject to the EU's third-party access regulations. According to these regulations, which apply to the telecommunication, electricity, and natural gas sectors, production and transport have to be controlled by separate companies on EU territory. For gas pipelines, this means that 50 per cent of the pipelines' capacities have to be made available to competitors. As a result, only half of Nord Stream's capacity could be used in its first year of operation. After a second connecting pipeline was opened in November 2013, Nord Stream was able to increase its utilisation to 36 billion cubic metres per year, that is, two-thirds of its capacity.[4]

3 Operationalisation: Analysing Pipeline Debates

The analysis of the German and Polish debates about Nord Stream is based on a revised version of the securitisation theory developed by the Copenhagen School (see Chap. 2), which brings together debates about security with actual decision-making processes and postulates that a

state's perception of security threats—including energy security—is an intersubjective construction by key actors. Accordingly, the analysis focuses on debates of key actors—namely, political elites and the mass media (as proxies for the public debate). Additionally, the concepts of 'riskification' and 'security jargon' have been applied.

As outlined in Chap. 2, any securitising move (i.e., the appeal to 'security' based on threat) requires an existential threat, a referent object that is threatened, and the proposition of extraordinary measures to save the referent object (i.e., a plan to defend). These three elements are essential to identifying a securitising move and distinguishing it from 'riskification' or 'security jargon'.

'Riskification' refers to 'security' based on risk; therefore, it requires a risk, a referent object at risk, and precautionary measures (i.e., a plan to govern). 'Security jargon' refers to 'security' based on (no clear) existential risk or threat and proposes no precautionary or extraordinary measures (i.e., no plan of action).

In this context, the analysis focuses on the perception of the Nord Stream project in German and Polish debates about energy security. For the period from 2004 to 2014, German and Polish press reporting and parliamentary debates regarding the perceived risks and threats related to the Nord Stream gas pipeline have been examined, using a software-based but non-automated quantitative and qualitative content analysis. As the focus is on national public debates, only mass media with nationwide coverage addressing a national audience in the respective countries were included. The analysis has been restricted to quality print media because these outlets provide (potentially) a regular and more substantiated coverage. For both countries, the selection includes the most popular print media and the most important media for the major political camps. All articles with any meaningful reference to the topic and with a reference to energy security were included, based on multiple searches in electronic databases.

In order to identify the positions of important political actors, debates and inquiries in the German and Polish parliaments related to the Nord Stream pipeline have been analysed based on searches in the online archives of both parliaments, using the same technique as with media reporting.[5]

4 The Polish Debate About Nord Stream

In Poland, the discussion of the Nord Stream pipeline—in the media as well as in parliament and across party lines—has been overwhelmingly negative. Nord Stream is seen as politically motivated and a threat to Poland's energy security. It has been argued that Russia would be able to interrupt gas deliveries to Poland, without harming Germany and other West European consumer countries, as soon as the pipeline construction is finished. Additionally, the construction of Nord Stream would result in environmental damage, in a loss of transit fees for Russian gas presently transported through Poland via the Yamal-Europe pipeline, and in the blockage of the harbour entrance in Świnoujście for larger vessels (which in turn would hamper Poland's diversification of energy supplies through the import of liquefied natural gas, LNG).

There has been a remarkably large debate in the Polish parliament (resulting in 118 documents included in this analysis).[6] The main risks or threats linked directly to the pipeline were mostly of an economic nature (61 documents) followed by political risks (50 documents). Technical risks related to the potential blockage of the harbour entrance in Świnoujście were mentioned in 42 documents, while environmental risks were mentioned in 40 documents (see Table 3.4).

However, of these 118 documents, only four include a full securitising move (i.e., can be considered a securitisation in the sense of the theory laid out in Chap. 2), while 47 documents qualify as 'riskification' and the majority of 67 documents fall into the category of 'security jargon'. Thus, the majority of documents detail the risk/threat caused by the Nord Stream pipeline but do not propose any counter-measures to mitigate the assumed negative effects (see Table 3.3).

The key arguments made can be illustrated by the following quotes:

> The realization of these plans means for Poland the omission of the construction of the Yamal II pipeline [trough Poland], the loss of transit fees and, therefore, the deterioration of its economic position. Additionally, it would block the construction of a gas pipeline between Poland and Norway and, thereby, hinder a diversification of gas supplies. Experts point to

> serious obstacles with intersecting underwater pipeline. (Deputy Adam Stanisław Szejnfeld, PO)[7]

> The majority of public opinion in our country considers this investment an attempt by Russia to increase its influence in Central Eastern Europe. This opinion is shared by our current Foreign Minister Radosław Sikorski, who compared the construction with the Ribbentrop-Molotov pact. […] In my opinion, there is a real danger that after the Baltic Sea pipeline is finished Poland will be pressured by Russia. The gas conflicts between Ukraine and Russia are evidence that such blackmail is possible. (Deputy Jarosław Jagiełło, PiS)[8]

> I want to remind you that the gas pact between Moscow and Berlin is not the first agreement in the history of these capitals that ignored Poland and that was against Polish interests. The Baltic Sea pipeline which connects Russia directly with Germany bypassing Poland is a political decision with strategic consequences for Poland. […] Has the minister not heard of the economization of Russia's foreign policy, reaching its political goals by utilizing resource dependence? The Russians admit openly that gas transit has a political dimension, even a strategic one. If the construction of the Baltic Sea pipeline would be a purely economic investment, why would the investors be willing to pay four times the amount needed for the construction of the Yamal II pipeline? (Deputy Elżbieta Kruk, PiS)[9]

However, these documents—while stating the risk/threat caused by the Nord Stream pipeline—do not propose any counter-measures to mitigate the assumed negative effects. Thus, they can only be considered 'security jargon'.

A 'riskification', on the other hand, has to propose a counter-measure to the risks/threats caused by the Nord Stream pipeline, such as the diversification of gas supplies:

> We have to make a political decision of strategic importance. The Baltic Sea pipeline […] connects Russia directly with Germany. Its construction harms our energy security; it also harms the energy security of Lithuania, Latvia, Ukraine, Belarus, the Czech Republic and Slovakia and – considering the environmental damage – of Estonia, Sweden and Denmark. […] Poland

> needs Russian gas as well as a sensible diversification of supplies. We do not have an aversion against Russia but common sense requires us to diversify our suppliers. Energy security is one of the most elementary goals of any state. Thus, it is also a priority for the European Union. (Deputy of the European Parliament, Bogusław Sonik, PO)[10]

Another counter-measure would be an alternative pipeline for Russian gas to Europe:

> For a proper judgment of the [Nord Stream, AH] pipeline project other factors are also important to consider: the risk of an ecological disaster […] and the risk to the emerging common European gas market. The [Polish, AH] government considers at the moment a feasibility study for the Amber pipeline project in cooperation with the Baltic States and maybe with Germany. The feasibility study will be able to demonstrate the advantages of an onshore pipeline while highlighting the disadvantages of an offshore pipeline. (Under-secretary in the Ministry of Economy, Eugeniusz Postolski)[11]

Under-Secretary Postolski cites risks to the environment and the common European gas market caused by the Nord Stream pipeline and proposes a feasibility study which should convince the involved parties of the advantages of an onshore pipeline through Poland (i.e., the Amber project).

One of the few examples of a securitising move is the speech of the Deputies, Czesław Hoc and Joachim Brudziński (PiS) from early 2008. However, it makes only an implicit reference to counter-measures in the form of a supply diversification.

> The realization of the Nord Stream project involves a range of negative consequences for the Republic of Poland […]. The most important ones are: (1) A substantial degradation of Poland's energy security, (2) a high risk of an ecological catastrophe in the entire Baltic Sea, (3) a limitation of maritime traffic for Polish civilian and military vessels during the construction and operation of the pipeline, including chiefly the limitation of the fishing area […]. […] Considering Poland's energy security the construction

> of the Nord Stream pipeline at the bottom of the Baltic Sea bypassing Polish territory is a fundamental threat to the Polish raison d'état and the Polish state. Any participation of Poland in its construction in any form is completely unacceptable. It is the strategic aim of the Russian Federation and the German companies to force Poland to participate in the realisation of the Nord Stream project and/or accompanying investments. The Russian Federation, majority owner of Gazprom, which is a key instrument of Russian foreign policy, aims to increase Poland's and other countries' dependency on Russian energy resources. The German companies aim to connect the Polish key energy consumers to their energy supply network on their terms. […] In this context, it has to be resolutely stressed that any hint by the Polish government to receive any additional gas supplies from Russia, especially via the Nord Stream pipeline, is a critical threat for a successful diversification of Poland's gas supplies. (Deputies Czesław Hoc and Joachim Brudziński, PiS)[12]

A similarly large debate occurred in the Polish media (a total of 102 documents). In the media, the perception of the Nord Stream pipeline is as negative as in the Polish Sejm, with references to political risks (60 documents) followed by economic (45 documents), environmental (28 documents), and technical risks (14 documents). Table 3.4 provides an overview of the figures.

Nevertheless, of these 102 documents, none can be considered a securitisation in the sense of the theory laid out in Chap. 2; 71 documents can be considered a 'riskification', while 31 documents fall into the category of 'security jargon' (Table 3.3).

Although the Polish media corpus is dominated by 'riskification', insightful discussion is scarce. Only a few documents in the Polish media reporting include a discussion which puts Polish risk/threat perceptions into perspective or demands changes in Poland's diplomatic efforts in order to avert the pipeline's construction.

> As the Swedish press announced the government will shortly approve the construction of the German-Russian gas pipeline through the Baltic Sea. […] The Finnish Foreign Minister Alexander Stubb said […] that if there are no serious environmental obstacles (which he does not expect) his government would too approve of the pipeline construction. Such result was to be expected from the beginning. The Baltic Sea pipeline does doubt-

> lessly hurt our economic interests. But the maritime law of 1982 ensures not only the freedom of passage by ship and plane but also the freedom to lay subsea cables and pipeline. Aspects of environmental protection might limit these freedoms but in such cases only a redirection of the pipeline route would be necessary. The Nord Stream AG expressed its willingness to such redirections and on many occasions such changes have already been made. In Poland, as well as in Scandinavia, opposition to the pipeline has focused mainly on environmental aspects. However, we have often not been credible in our opposition. In an ecological seminar in Helsinki a high-ranking representative of the Polish environmental administration shocked the audience by claiming that the consequences of the pipeline construction would be worse than that of the explosion of the atomic bomb over Hiroshima. (*Polityka* 2009)[13]

Another example is an article by Slawomir Debski, director of the Research and Analysis Office at the Polish Institute for International Affairs (Polski Instytut Spraw Międzynarodowych, PISM):

> Russia views Germany as its most important partner in Europe. The successful conclusion of the Russo-German contract for building the Nord Stream gas pipeline has emboldened the Russians so much that they intensified their efforts to pour sand into the gears of European integration and to break up European unity. This is promoted by offers to grant to Germany the status of Russia's privileged economic partner, especially with regard to the extraction and deliveries of fossil fuels. For the time being, offers of this kind produce effects contrary to those intended, by making Germany more wary in its contacts with Moscow. That is because the Germans would never risk enfeebling the European Union in return for the mirage of economic privileges touted by a partner with a dubious reputation who does not respect agreements. (*Gazeta Wyborcza* 2007)[14]

4.1 Applying Securitisation Theory to the Polish Debate

What Kind of Security Debate?

In the Polish debate, there were only four securitising moves, all of which occurred in the Sejm. However, the debate in the Polish parliament is

dominated by 'security jargon', as the largest portion of the documents fall into this category (67 out of 118 documents, or 56.8 per cent); 'riskification' occurs in 39.8 per cent of the documents (47 out of 118). The situation is reversed in the Polish media; here, 'security jargon' accounts for only 30.4 per cent of the documents (31 out of 102), while 'riskification' dominates with 69.6 per cent of the analysed documents (71 out of 102).

Overall, the Polish debate is rather evenly split between 'security jargon' (45.0 per cent) and 'riskification' (53.6 per cent).

What Kind of Risk/Threat Perception?

In both parliament and media, the construction of the Nord Stream pipeline is viewed as an entirely negative development. While the Sejm considers the main risks or threats linked directly to the pipeline to be mostly of an economic nature (61 out of 118 documents, 71.7 per cent) followed by political risks (50 documents, 42.4 per cent), in the Polish media, political risks dominate the discussion (60 out of 102 documents, 58.8 per cent) followed by economic risks (45 documents, 44.1 per cent) (see Table 3.4).

In the Sejm, technical risks related to the potential blockage of the harbour entrance in Świnoujście were mentioned in 42 documents (35.6 per cent), while environmental risks were mentioned in 40 documents (33.9 per cent). In Polish media reporting, environmental risks are mentioned in 28 documents (27.5 per cent) and technical risks in 14 documents (13.7 per cent).

Overall, the Sejm considers the main risks or threats to be mostly of an economic nature, while, in the Polish media, political risks dominate the discussion. Both corpora show similar proportions for environmental risks; however, technical risks are much more prominent in the debate in the Sejm.

What Kind of Counter-Measures?[15]

Overall, the Nord Stream debate in the Polish Sejm has been rather short on counter-measures, reflected in the dominance of 'security jargon'.

Both corpora rank the counter-measure, 'new pipelines/ transit route' first, with 25.5 per cent of the parliamentary documents and 31.0 per cent of the media documents mentioning this option. While the Polish media place 'supply diversification' as the second most frequently mentioned counter-measure (26.8 per cent of the documents), the Sejm cited the 'deepening of the pipeline' (23.5 per cent) more often than 'supply diversification' (15.9 per cent) (see Table 3.1).

Table 3.1 Counter-measures proposed in Poland with a positive or neutral attitude (number of documents and ratio)

Sejm (51)		Polish Media (71)	
New pipelines/transit route	13 (25.5%)	New pipelines/transit routes	22 (31.0%)
Deepening of pipeline	12 (23.5%)	Supply diversification	19 (26.8%)
Supply diversification	8 (15.9%)	Connection to Nord Stream	16 (22.5%)
Legal processes and mechanisms/contracts	6 (11.8%)	LNG	14 (19.7%)
Common European energy policy	4 (7.8%)	Common European energy policy	12 (16.9%)
LNG	4 (7.8%)	Grid integration	9 (12.7%)
Connection to Nord Stream	2 (3.9%)	Deepening of pipeline	4 (5.6%)
Use of alternative energies	2 (3.9%)	Nuclear energy	3 (4.2%)
Market mechanisms/third EU energy package	1 (2.0%)	Clean coal technology	2 (2.8%)
Grid integration	1 (2.0%)	Development of existing gas transit network	2 (2.8%)
Cooperation with other countries/joint oppositional front	1 (2.0%)	Legal processes and mechanisms/contracts	2 (2.8%)
Clean coal technology	1 (2.0%)	Use of alternative energies	2 (2.8%)
Storage	1 (2.0%)	Energy saving	1 (1.4%)
Surveying of the Baltic Sea	1 (2.0%)	Market mechanisms/third EU energy package	1 (1.4%)
		Shale gas	1 (1.4%)
		Public supervision of Nord Stream construction	1 (1.4%)
		Common investment decisions within the EU	1 (1.4%)

However, the deepening of the Nord Stream pipeline at the harbour entrance in Świnoujście can be considered a necessary means of supply diversification (as it enables the import of LNG via larger vessels and the construction of a pipeline from Scandinavia). Therefore, these two counter-measures might be combined, amounting to 39.4 per cent of the parliamentary documents. For the media, that would result in a total of 32.4 per cent (even though the media did not consider technical risks very important).

In the Polish media, the 'connection to Nord Stream' is mentioned by 16 documents (22.5 per cent); on the one hand, in interviews with foreign politicians or businessmen, and on the other, in discussions about a solution for the perceived threat that Russia might interrupt gas supplies to Poland via the 'Brotherhood' or 'Yamal' pipelines.

In fourth place comes 'legal procedures and mechanisms/ contracts' against the construction of Nord Stream in the Sejm and the import of LNG in the media reporting.

In both corpora, the counter-measure 'common European energy policy' is ranked fifth. However, there are significant differences within the Polish discourse regarding cooperation on an EU level: while, in the Sejm, this counter-measure was mentioned in 7.8 per cent of the parliamentary documents, it occurred in 16.9 per cent of the media reporting. Thus, the Sejm does not consider 'common European energy policy' a suitable remedy against the Nord Stream pipeline. If the counter-measure, 'common European energy policy', is combined with the measures 'grid integration' (i.e., the integration of the European pipeline grid with interconnectors in order to allow for gas transportation across all EU member states with the exception of Malta) and 'market mechanism/ third EU energy package' (i.e., reliance on market mechanisms and increased competition within the EU in order to enhance energy security), the picture becomes even more skewed: cooperation on energy policy at the EU level was mentioned in only 11.8 per cent of the parliamentary documents, while these combined counter-measures cropped up in 32.4 per cent of the media reporting.

Cooperation with other countries is only mentioned with respect to opponents of the Nord Stream pipeline within the EU but not in connection to Germany and other countries benefiting from the Nord Stream pipeline.

5 The German Debate About Nord Stream

The discussion in Germany has been more positive towards the Nord Stream pipeline which has often been presented as an alternative transport route that avoids transit countries and, therefore, enhances Germany's energy security. Dissenting voices in the German debate point to the environmental risks involved in the pipeline's construction, the harm to relations with Poland and the Baltic States, which strongly oppose the pipeline, and the increasing dependence on Russian gas deliveries.

In the German parliament, there was only a minor discussion about the Nord Stream pipeline (leading to a total of 25 documents relevant for our analysis). Overall, as Table 3.4 shows, in German parliamentary debates, environmental risks (directly linked to the Nord Stream pipeline) and political risks were mentioned in eight documents, respectively, followed by economic (four documents) and technical risks (one document).

However, of these 25 documents, none includes a securitising move (i.e., can be considered a securitisation in the sense of the theory laid out in Chap. 2). Twenty-one can be considered a 'riskification', while four documents fall within the category of 'security jargon' (see Table 3.3).

The respective government coalitions (no matter which parties were involved), as well as parts of the opposition, were mostly in favour of the pipeline. The following examples of 'riskification' cite unreliable transit countries as the main reason for their positive view of the Nord Stream pipeline which is considered a counter-measure to this risk:

> The dependency [on gas supplies from Russia, AH] will probably rise to more than 40 per cent. The import dependency for natural gas in the European Union is currently 57 per cent (from countries outside the EU) and it is expected to increase to more than 70 per cent. However, the

> dependency from Russia is not problematic for Europe or Germany, respectively; it is a problem that 80 per cent of the gas is transported through pipelines crossing Ukraine. Thus, we will be constantly involved in the unresolved conflicts between Russia and Ukraine and so at risk of being held hostage every winter. As an alternative there are two additional pipelines […]: on the one hand, the Nabucco pipeline carrying Caspian gas to Europe and, on the other, the Baltic Sea pipeline. It would be desirable if not only former statesmen would support these projects but also if Europe and the German government would foster these projects more strongly. (Deputy Manfred Grund, CDU/CSU)[16]

> […] around 80 per cent of the European natural gas imports are transported through Ukraine. Even after the completion of the Baltic Sea pipeline 'Nord Stream' this amount will only be reduced to 66 per cent. […] The German Bundestag requests the government to: […..] (9) foster cooperation in energy issues among EU countries more strongly than before. The aim of a European energy community should not only include the setting of international standards but also coordinated reactions to supply interruptions. It is necessary to develop European standards for the storage of oil and especially gas reserves in order to initiate solidarity measures to protect all member states from the consequences of such interruptions. (Parliamentary group of the FDP)[17]

It was the Green party (in opposition since shortly after the pipeline contract was signed) which was most critical. Representatives of the Green party primarily cited the environmental risks involved in the construction and the harm for Germany's relations with Poland and the Baltic States as arguments against constructing the Nord Stream pipeline. Interestingly, these critical voices often employed 'security jargon':

> The mustard gas grenades and other ammunition in the Baltic Sea that fishermen continuously haul out of the water are life-threatening and can cause ecological catastrophes. […] At the bottom of the Baltic Sea lie 400,000 tonnes of ammunition and chemical weapons. […] We Germans have a historical responsibility to solve this problem. We will not be able to do that alone but only in cooperation with other littoral states. (Deputy Rainder Steenblock, Bündnis 90/ Die Grünen)[18]

> The planned Baltic Sea pipeline is an ecological and political questionable project. […] Additionally, ecological concerns in the littoral states are growing against the background that several hundred thousand tonnes of ammunition lie on the ground of the Baltic Sea […]. […] Dumped into the sea after the end of the Second World War, mines, torpedoes, bombs and grenades endanger people at the beaches, fishermen, sportsmen as well as the maritime flora and fauna. (Deputy Rainder Steenblock, Bündnis 90/ Die Grünen)[19]

> […] the Nord Stream project is not beneficial for the diversification of European gas supplies but for Gazprom's monopolistic infrastructure from the production, via transport to the final customers. (Parliamentary group of Bündnis 90/ Die Grünen)[20]

In German media reporting (in total 51 documents), the pipeline was criticised for being a political project meant to exert pressure on transit countries for Russian gas and for harming relations with Poland and the Baltic States. The pipeline would also increase Germany's dependence on Russian gas imports, while risking environmental damage to the Baltic Sea, and be too expensive compared with alternative pipelines on land. As for the main risks/threats caused by the Nord Stream pipeline, the German media listed political (23 documents), environmental (15 documents), and economic risks (three documents). There was no mention of technical risks. Table 3.4 provides an overview of the figures.

However, of these 51 documents, only one includes a de-securitising move.[21] It was uttered by the Russian Minister of Industry, Viktor Kristenko, in 2006, when he tried to refute arguments against the Nord Stream pipeline and the underlying risk perceptions (i.e., it can be subsumed under securitisation as laid out in Chap. 2); 47 documents can be considered a 'riskification', while three documents fall under the category of 'security jargon' (see Table 3.3).

An article from *Süddeutsche Zeitung* provides an example of a 'riskification', where the environmental risk is prescribed and counter-measures in the form of legal procedures are mentioned[22]:

> The project has been highly controversial in the littoral states. The Baltic States and Poland were concerned about an expansion of the Russian

> sphere of influence. In Sweden, too, politicians warned that Moscow might use the pipeline as a pretext for increasing its military presence in the Baltic Sea. Environmental organizations criticize that requirements are still not strict enough. In Germany […] two environmental organizations filed a lawsuit. WWF and Bund Naturschutz [sic! Bund für Umwelt und Naturschutz Deutschland, Friends of the Earth, AH] want to make sure that the Nord Stream consortium will be obliged to make compensation measures if the pipeline causes any damage. (*Süddeutsche Zeitung* 2010)[23]

A counter-argument against the presented risk/threat perceptions was provided by former German Chancellor Gerhard Schröder. He now works for the Nord Stream AG, which builds and operates the pipeline, as Chairman of the Shareholders' Committee:

> According to Schröder, [Nord Stream's capacity, AH] amounts to only a quarter of the additional demand needed in a few years. The limited capacity of the pipeline alone would prove that Nord Stream is not directed against any littoral states such as Poland or the Baltic States that are bypassed by the pipeline. 'We need additional transport routes' Schröder said. (*Spiegel Online* 2008)[24]

5.1 Applying Securitisation Theory to the German Debate

What Kind of Security Debate?

In the German debate, there was only one securitising move (a desecuritisation move by the Russian Minister of Industry). Overall, the discourse in Germany was characterised by a dominance of 'riskification' (68 out of 76 documents, or 89.5 per cent). Of the total of 76 documents, only seven fall into the category of 'security jargon' which amounts to 9.2 per cent. 'Security jargon' is more prominent in parliament, with four out of 25 documents, or 16.0 per cent; in German media reporting, only three out of 51 documents fall into this category (5.9 per cent).

What Kind of Risk/Threat Perception?

In German parliamentary debates, environmental risks (directly linked to the Nord Stream pipeline) and political risks were mentioned in eight docu-

ments, respectively (32.0 per cent each), followed by economic (four documents, 16.0 per cent) and technical risks (one document, 4.0 per cent).

In the German media reporting, political risks/threats dominate the debate with 23 documents, or 45.1 per cent, followed by environmental (15 documents, 29.4 per cent) and economic risks (three documents, 5.9 per cent). Technical risks received no mention (Table 3.4).

Overall, political risks are more prominent in the German media debate, while, in parliament, the economic risks were more extensively discussed (often with Nord Stream as a solution). Both corpora show similar concerns about the environmental risks of the pipeline construction. Technical risks do not play a role.

What Kind of Counter-Measures?[25]

In Germany, the first three counter-measures proposed by both parliament and media are similar (see Table 3.2): around half the documents propose 'new pipelines/ new transit routes' as a solution for perceived risks for German energy security. This counter-measure often includes the Nord Stream pipeline which is considered, in many documents, to be a solution to energy security risks (especially, the protracted Russian-Ukrainian gas conflicts). Thus, Nord Stream is the most often proposed counter-measure (in nine documents from the Bundestag and 16 from the media). Texts that consider the Nord Stream pipeline a problem for Germany's energy security due to an increasing dependence on Russian gas supplies, for instance, often cite the Nabucco pipeline as a possible solution (two documents from the Bundestag and in five from the media).

This is followed by 'supply diversification' which receives more attention in the German media than in parliament (39.6 per cent to 28.6 per cent). Both corpora rank a 'common European energy policy' third (stronger in parliament with 28.6 per cent to 18.8 per cent).

The counter-measure, 'connection to Nord Stream', refers to Polish concerns about the pipeline which have been discussed in Germany. However, it is barely considered an option in the German media. The 'new business model' (i.e., a new payment model for Russian gas supplies to Ukraine) and 'EU monitoring of gas transit' counter-measures both

Table 3.2 Counter-measures proposed in Germany with a positive or neutral attitude (number of documents and ratio)

Bundestag (21)		German Media (48)	
New pipelines/transit routes	10 (47.6%)	New pipelines/transit routes	24 (50.0%)
Supply diversification	6 (28.6%)	Supply diversification	19 (39.6%)
Common European energy policy	6 (28.6%)	Common European energy policy	9 (18.8%)
Connection to Nord Stream	3 (14.3%)	Grid integration	9 (18.8%)
LNG	2 (9.5%)	Use of alternative energies	7 (14.6%)
Storage	2 (9.5%)	Market mechanisms/third EU energy package	6 (12.5%)
Use of alternative energies	2 (9.5%)	Energy saving	5 (10.4%)
Grid integration	1 (4.8%)	Storage	5 (10.4%)
Market mechanisms/third EU energy package	1 (4.8%)	Legal processes and mechanisms/contracts	3 (6.3%)
Nuclear energy	1 (4.8%)	New business model[a]	3 (6.3%)
		Development of existing transit networks	2 (4.2%)
		Integration of EU and Russian energy markets	2 (4.2%)
		Nuclear energy	2 (4.2%)
		EU monitoring of gas transit[a]	1 (2.1%)
		Connection to Nord Stream	1 (2.1%)
		Shale gas	1 (2.1%)

Note: [a]These counter-measures also relate to the perceived risk/thread of the protracted Russian-Ukrainian gas conflicts for Germany's energy security

refer to the perceived risk of supply interruptions caused by disputes between Russia and Ukraine.

In summary, in the German debate, the Nord Stream pipeline is first of all treated as an industrial project which raises serious environmental concerns. The growing dependence on Russia as energy supplier is also an issue in the German debate. However, in Germany, the issue becomes politicised mainly through a reflection of political concerns in Poland. As a result, any search for solutions/counter-measures points in the direction of high environmental standards and diplomatic efforts to address the concerns of Poland and other transit countries. Overall, the German

media seems to have a more critical stand towards the Nord Stream pipeline than the parliament.

6 Comparing the Nord Stream Debate in Poland and Germany

In a final step, the debates in both Poland and Germany about the Nord Stream pipeline are now compared.

What Kind of Security Debate?
Applying the theoretical framework developed in Chap. 2 leads to rather surprising observations. Despite a lot of security language, securitisation is a rare exception. Out of total of 296 documents, only five include what can be considered a securitising move. A total of 105 documents alone fall into the category of 'security jargon'—even though they use threat rhetoric, they do not offer any counter-measures to avoid the predicted harm (Table 3.3).

Overall, 'security jargon' is considerably more prevalent in the Polish debate. It is especially common in the Polish Sejm where more than half of all documents belong to this category. The German debate largely abstained from 'security jargon'; here 'riskification' dominates the discourse.

Thus, it can be concluded that the Polish debate is conducted in a much more emotional fashion than the debate in Germany. As the following analysis shows, this significant difference can be explained in terms of underlying threat perceptions.

Table 3.3 Documents sorted by theoretical concept

	Polish Sejm	Polish media	German Bundestag	German media	Sum
Securitisation	4	0	0	1[a]	**5**
Riskification	47	71	21	47	**186**
Security jargon	67	31	4	3	**105**
Sum	**118**	**102**	**25**	**51**	**296**

Note: [a]It was actually a de-securitising move

Table 3.4 Perceived risks/threats linked to the Nord Stream pipeline by source (number of documents)

Nature of perceived threat/risk	Polish Sejm (118)	Polish media (102)	Poland (220)	German Bundestag (25)	German media (51)	Germany (76)
Political	50	60	**110 (50.0%)**	8	23	**31 (40.8%)**
Economic	61	45	**106 (48.2%)**	4	3	**7 (9.2%)**
Environmental	40	28	**68 (30.9%)**	8	15	**23 (30.3%)**
Technical	42	14	**56 (25.5%)**	1	0	**1 (1.3%)**

Note: Includes all three theoretical categories, 'security jargon', 'riskification', and securitisation

What Kind of Risk/Threat Perception?

While all the Polish documents consider Nord Stream a severe threat to the country's energy security, only some of the documents analysed in the German debate perceive the pipeline as a threat to Germany's energy security as it would lead to an overreliance on one single gas supplier. Other critical German voices see the pipeline as a liability for the relations with neighbouring countries (first of all, Poland).

Supporters of the Nord Stream pipeline in Germany see the recurring gas conflicts between Russia and Ukraine as one of the main threats to German energy security and, therefore, a diversification of import routes as a solution to that problem: Nord Stream would be able to mitigate the negative consequences of another gas conflict.

Poland, on the other hand, considers the Russian-Ukrainian gas conflicts only as a symptom of Russia's overarching intention to dominate Central Eastern Europe and to pressure the EU. This intention—according to the common opinion in the Polish debate—would only be strengthened by the Nord Stream pipeline.

These different threat perceptions make cooperation difficult. As Nord Stream is widely seen as a pure threat in Poland, German recommendations to join the pipeline (as a counter-measure) might be considered scornful by the Polish side.

The perceived risks/threats to the country's energy security can be grouped into four categories: political, economic, environmental, and technical risks/threats. In both the Polish and the German debate,

political risks receive the highest number of mentions: in 50.0 per cent of documents in the Polish case and in 40.8 per cent in the German one.

In Germany, there are only limited concerns for economic risks caused by the Nord Stream pipeline, while 48.2 per cent of the Polish documents mention this kind of risk (a close second to political risks). The proportion of documents that mention environmental risks are similar in both countries—around 30 per cent. While Poland fears for its access to the harbour of Świnoujście, technical risks are not a topic in the German debate.

What Kind of Counter-Measures?[26]

As expected, the counter-measures (with a neutral or positive attitude) reflect the prevailing risk/threat perceptions in the countries under study. The most often proposed counter-measure in all four corpora is 'new pipelines/ transit route'. In Poland, this means everything but Nord Stream, especially the Amber pipeline project and the Yamal-Europe II pipeline. In Germany, however, Nord Stream is mostly seen as a solution to energy security risks (especially, in the context of the gas conflicts between Russia and Ukraine). 'Supply diversification' comes second in both the Polish and the German debate (see Table 3.5 in the appendix).

There are significant differences regarding the counter-measure, 'common European energy policy', between the two countries; this is not immediately obvious as the counter-measure comes third in the German debate, while in Poland it comes fifth. However, while critics of the Nord Stream pipeline in Germany often call for more cooperation in the field of energy within the EU and warn of further unilateral decisions, this counter-measure plays only a marginal role in Poland (21.7 per cent of the German documents, 13.1 per cent of the Polish documents). If the counter-measure, 'common European energy policy', is combined with the related counter-measures, 'grid integration', and, 'market mechanism/ third EU energy package', the figure increases in Germany to 46.4 per cent of the documents and to 23.8 per cent of the Polish documents.

In Poland, the reason for the limited support for cooperation on the EU level might lie in the perception that the EU is only a club for big countries:

> We agree and support the thesis that the development of the EU and the realisation of EU policies should be characterised by cooperation. How can in this context the economic pact between Russia and Germany, which agrees on the pipeline construction at the bottom of the Baltic Sea neglecting the interests of Poland and the Baltic States, be explained? The pipeline construction at the bottom of the Baltic Sea shows that the EU in practice has neither a common foreign policy nor a common security policy. The Polish protests against such actions will only be effective if they succeed in building a strong front of opposition that bundles the interest of the affected member states. It looks as if the new EU members are regarded mainly as a sales market and as a source of cheap labour; they are not treated as equals when political and economic interests are at stake. The pipeline case can become a trigger for resistance against the diktat of the great powers of old Europe and may lead to radical reconstruction of the Union in the spirit of solidarity. (Deputy Waldemar Starosta, Samoobrona Rzeczpospolitej Polskiej)[27]

In Germany, on the other hand, a common European energy policy is considered desirable:

> Nobody really believes in the development of a common energy policy as proposed in the [EU, AH] Green Book. Since Germany decided—against the explicit will of its EU partner Poland—to build with Russia the Baltic Sea pipeline, it is more unlikely than ever that Europe will ever speak with one voice when it comes to energy. Regarding the supply security with energy—considered by all EU member states as essential—national egoisms probably will increase.[28]

> The Baltic Sea pipeline—as partner in the red-green government coalition we were involved in its last phase—is not a cooperation project. This is not the way to conduct the Baltic Sea cooperation; the project only aggravates all cooperation partners in the Baltic Sea region. […] If the Baltic Sea

> cooperation is supposed to be functioning […] it would be helpful that the question of pipelines is not solved bilaterally but within the cooperation framework and with the EU in the background. (Deputy Rainder Steenblock, Bündnis 90/Die Grünen)[29]

Surprisingly, the counter-measure 'connection to Nord Stream' was much more frequently mentioned in the Polish debate than in Germany (8.2 per cent to 5.3 per cent). 'Connection to Nord Stream' as a mitigation for Polish energy security concerns is proposed in four German documents (three of them from the Bundestag), while in the Polish media this is considered an option in 18 documents (it should, however, be noted that a positive attitude towards this option comes mostly from foreign authors or interviewees).

7 Conclusion: What the Debate Did Not Show

As the Polish debate has left no doubt that the Nord Stream pipeline constitutes a threat to Poland's national security, one would have had expected:

- A very emotional debate steeped in history (i.e., using many historical references).
- A dominance of political risk/threat perceptions in the Polish debate.
- A large number of securitising moves, as the Nord Stream pipeline is considered an existential threat to Poland.

While the debate on the Polish side was emotional and rich in historical references,[30] other theory-based expectations, however, were not fulfilled.

Political risk/threat perceptions did not dominate the Polish debate; this category was on par with economic risks/threats. They did, however, dominate the much more sober German debate.

The most surprising result of the analysis has been so far that securitising moves did not only not dominate the debates about Nord Stream, but they were rare exceptions (only five out of 296 documents). 'Security jargon', threat-based security language that does not offer any solutions and counter-measures, dominated the Nord Stream debate in the Polish Sejm. The deputies trusted with producing legislation did not show much resolve to propose any solutions but seemed more interested in maintaining a high level of fear and hysteria. However, 'riskification', the more sober analysis of the problem and search for solutions, dominated the German debate, in general, and was also more common in the Polish media debate.

To summarise, the emotional Polish debate about the Nord Stream pipeline has clearly been focused on a threat perception which links most risks directly to fears of Russian-German rapprochement at the expense of Polish interests. However, the question remains: why are solutions and/or counter-measures so seldom discussed? Do politicians simply use populism as a strategy and play the 'blame game', that is, ascribe responsibility for the crisis to the opposing political camp and/or the predecessor government?

Examples of the 'blame game' are plentiful:

> The Polish government does nothing, it even facilitated the realisation of this project [the Nord Stream pipeline, AH]. […] In February 2003, vice minister Marek Pol signed a contract which made Poland completely dependent on gas deliveries. This contract alone has made Poland completely dependent on Russia. (Deputy Elżbieta Kruk, PiS)[31]

> Finally, the compromising fact about Donald Tusk and his foreign minister Radosław Sikorski—their complete capitulation in front of the Russian-German investment of Nord Stream. Due to the prime minister's lack of distinct opposition, Germany has built together with the Russians a gas pipeline through the harbour entrance of Świnoujście which will permanently hinder […] the development of our harbour in Świnoujście. (Deputy Joachim Brudziński, PiS)[32]

> There was a time when Poland was against the construction of the Baltic Sea pipeline. However, since the change of government in 2007 the opposition has been suppressed. It can be assumed that the defence of Poland's main interests is not a priority for the PO-PSL government. (Deputy Jadwiga Wiśniewska, PiS)[33]

After 2007, however, the Tusk government did not change decisions of the predecessor government regarding energy policy; it did not abandon the construction of an LNG terminal on the Baltic Sea coast. Before that point, it had been usual practice in Poland after every change of government between centre-left and centre-right for the incoming administration to renounce the energy projects initiated by its predecessor.[34]

Nevertheless, a continuation of the conservative energy policy by the Tusk government did not stop the opposition from using 'security jargon' to, so it seems, spread fear and disinformation:

> Unfortunately, the Nord Stream pipeline will be built but it is not true that it will block the harbour entrance of Świnoujście. Your whole argument is based on the fact—and you abuse it—that not everybody knows that Świnoujście has two harbour entrances: the western channel und the currently not used northern channel. Through the western channel, where the pipeline will be build, ship traffic will reach Świnoujście as before, especially the LNG tankers. The discussion refers only the some corrections concerning the northern channel. Stop scaring and misleading the Polish public! (Foreign Minister Radosław Sikorski)[35]

While from a theoretical perspective, 'security jargon' is something different from 'securitisation', their effects on political discourse are rather similar: in both cases, the use of security language results in depoliticisation. Contested issues/topics are removed from the field of 'normal' political discourse, leading to an insulation from critical discussion. While a particular perspective becomes locked in and dominates the discourse, other divergent positions are blocked, resulting in a stifling of political debate.

Appendix

Table 3.5 Proposed counter-measures in Poland and Germany with a positive or neutral attitude (number of documents and ratio)

Germany		Poland	
New pipelines/transit routes	34 (49.3%)	New pipelines/transit routes	35 (28.7%)
Supply diversification	25 (36.2%)	Supply diversification	27 (22.1%)
Common European energy policy	15 (21.7%)	Connection to Nord Stream	18 (14.8%)
Grid integration	10 (14.5%)	LNG	18 (14.8%)
Use of alternative energies	9 (13.0%)	Common European energy policy	16 (13.1%)
Market mechanisms/third EU energy package	7 (10.1%)	Deepening of pipeline	16 (13.1%)
Storage	7 (10.1%)	Grid integration	10 (8.2%)
Energy saving	5 (7.2%)	Legal processes and mechanisms/ contracts	8 (6.6%)
Connection to Nord Stream	4 (5.8%)	Use of alternative energies	4 (3.3%)
Legal processes and mechanisms/contracts	3 (4.3%)	Nuclear energy	3 (2.5%)
New business model	3 (4.3%)	Clean coal technology	3 (2.5%)
Nuclear energy	3 (4.3%)	Market mechanisms/ third EU energy package	3 (2.5%)
Development of existing transit networks	2 (2.9%)	Development of existing gas transit network	2 (1.7%)
Integration of EU & Russian energy markets	2 (2.9%)	Energy saving	1 (0.8%)
LNG	2 (2.9%)	Shale gas	1 (0.8%)
EU monitoring of gas transit	1 (1.4%)	Public supervision of Nord Stream construction	1 (0.8%)
Shale gas	1 (1.4%)	Common investment decisions within the EU	1 (0.8%)
		Cooperation with other countries/joint oppositional front	1 (0.8%)
		Storage	1 (0.8%)
		Surveying of the Baltic Sea	1 (0.8%)

Notes

1. Cf. for example, 'Poland recalls Hitler-Stalin pact amid fears over pipeline', *The Guardian*, 1 May 2006, available at https://www.theguardian.com/world/2006/may/01/eu.poland. For a clarification by the Polish Ministry of Defence see: Paszkowski, Piotr (2006) Minister Sikorski o współpracy w dziedzinie energetyki, *Ministerstwo Obrony Narodowej*, 30 April, available at http://www.mon.gov.pl/artykul_wiecej.php?idartykul=1696. Speaking of a misinterpretation, the press release states: 'The minister did not place the Ribbentrop-Molotov pact and the pipeline agreement on the same level. He referred to painful historical events to explain Poles' sensitivity to agreements made without their knowledge. He used the Ribbentrop-Molotov pact to picture emotions raised by the construction of the pipeline' (all translations by the author unless stated otherwise).
2. For a more detailed analysis of Russian export pipelines see: Heinrich (2014).
3. Analytical overviews of criticism and underlying rationales are given by: Bouzarovski and Konieczny 2010; Larsson 2007; Lidskog and Elander 2012.
4. Meanwhile, the EU has revised its decision in October 2016 and allowed Gazprom to use up to 80 per cent of one of the connecting pipelines. However, Poland has challenged this decision in court and, as a result, it has been suspended. Cf., e.g., Yafimava 2017; Loskot-Strachota 2017.
5. For a detailed description of the media selection and the operationalisation of the research project see 'Documentation of data collection', available at: http://www.forschungsstelle.uni-bremen.de/UserFiles/file/04-Forschung/documentation_data-collection.pdf.
6. This chapter scrutinises only the theoretical aspects of the Nord Stream debate. For a detailed analysis of the arguments for or against the Nord Stream pipeline in Poland and Germany (which includes a larger number of documents, as it is not based on securitisation theory), see Heinrich and Pleines 2017.
7. Szejnfeld, Adam Stanisław (2004) *Interpelacja nr 6806 do prezesa Rady Ministrów w sprawie zwiększenia polskiego bezpieczeństwa w zakresie dostaw gazu dla ludności i gospodarki*, 28 February, available at http://www.sejm.gov.pl/sejm7.nsf/stenogramy.xsp.
8. Jagiełło, Jarosław (2008) Interpelacja nr 4634 do ministra spraw zagranicznych w sprawie budowy gazociągu północnego, in: Sejm

Rzeczypospolitej Polskiej, *Kadencja VI: Aneksu do Sprawozdania Stenograficznego z 21. posiedzenia Sejmu w dniach 2, 3, 4 i 5 września 2008 r* [2.-5.9.2008], pp. 208–209.
9. Sejm Rzeczypospolitej Polskiej (2005) *Kadencja IV: Sprawozdanie Stenograficzne z 107. posiedzenia Sejmu Rzeczypospolitej Polskiej w dniu 7 lipca 2005 r* [7.7.2005]. Informacja bieżąca, pp. 364–381, here p. 371.
10. Sonik, Bogusław (2005) Opinie: Gazowy szantaż, *Rzeczpospolita*, 2 July, obtained via Factiva, Document RZEPOL0020050702e1720000f.
11. Sejm Rzeczypospolitej Polskiej (2007) *Kadencja VI: Sprawozdanie Stenograficzne z 4. posiedzenia Sejmu Rzeczypospolitej Polskiej w dniu 19 grudnia 2007 r* [19.12.2007]. Punkt 10. porządku dziennego: Pytania w sprawach bieżących, pp. 162–182, here pp. 166–167.
12. Hoc, Czesław/Brudziński, Joachim (2008) Interpellation nr 826 do ministra gospodarki w sprawie budowy gazociągu północnego po dnie Bałtyku (koncernu Nord Stream AG), in Sejm Rzeczypospolitej Polskiej, *Kadencja VI: Aneksu do Sprawozdania Stenograficznego z 8. posiedzenia Sejmu w dniach 6, 7 i 8 lutego 2008 r.* [6.-8.2.2008].
13. 'Pogoda dla gazociągu', *Polityka*, No. 37 (2722), 12 September 2009, p. 11, available at: http://archiwum.polityka.pl/wydanie/0,19680.htm.
14. Dębski, Sławomir (2007) Z Rosją – bez pośpiechu, *Gazeta Wyborcza*, 17 January, available at: http://wyborcza.pl/1,76842,3854024.html.
15. Only documents that fall into the categories of 'riskification' and securitisation are analysed, as per the definition, the category 'security jargon' proposes no counter-measures (the total number of documents from the Sejm is 51, and from the Polish media reporting, it is 71).
16. Deutscher Bundestag (2009) *Stenografischer Bericht, 230. Sitzung*, Plpr-Nr. 16/230, 2 July, pp. 25699–25700.
17. Deutscher Bundestag (2007) *Antrag der Abgeordneten Gudrun Kopp,[…] und der Fraktion der FDP—'Energieaußenpolitik für das 21. Jahrhundert'*, Drucksache 16/6796, 24 October.
18. Deutscher Bundestag (2007) *Stenografischer Bericht, 109. Sitzung*, Plpr-Nr. 16/109, 6 July, pp. 11333–11334.
19. Deutscher Bundestag (2008) *Stenografischer Bericht, 160. Sitzung*, 8 May, p. 16968.
20. Deutscher Bundestag (2007) *Entschließungsantrag der Abgeordneten Marieluise Beck (Bremen)[…]weiterer Abgeordneter und der Fraktion BÜNDNIS 90/DIE GRÜNEN und deren Antwort (Drucksachen 16/4932, 16/6241)—'Aktuelle Entwicklungen in Russland und ihre Auswirkung auf*

die Beziehungen zwischen der EU und Russland', Drucksache 16/7186, 14 November.

21. The Copenhagen School understands de-securitisation as moving an issue 'out of emergency mode and into the normal bargaining process of the political sphere' (Buzan et al. 1998: 4, see also p. 29). De-securitisation means to turn threats into challenges and security into politics again (Wæver 1995: 55, 60).
22. However, these counter-measures are envisaged only in the case of an accident causing environmental damage; they do not mitigate other risks/threats or try to prevent the construction of the Nord Stream pipeline (I thank Marco Siddi for his comment).
23. Herrmann, Gunnar (2010) Ostsee-Pipeline genehmigt: Finnland macht Weg endgültig frei für Bau der Gas-Röhre, *Süddeutsche Zeitung*, 13 February, obtained via Factiva, Document SDDZ000020100213e62d0000y.
24. Wittrock, Philipp (2008) Energiekonferenz des Umweltministers: Schröder singt Jubelarien auf Russland, *Spiegel Online*, 25 September, obtained via Factiva, Document SPGLO00020080925e49p0006c.
25. Only documents that fall into the categories of 'riskification' and securitisation are analysed; as per the definition, the category 'security jargon' proposes no counter-measures (the total number of documents from the Bundestag is 21, and, from the German media reporting, it is 48).
26. Only documents that fall into the categories of 'riskification' and securitisation are analysed; as per the definition, the category 'security jargon' proposes no counter-measures.
27. Sejm Rzeczypospolitej Polskiej (2005) *Kadencja IV: Sprawozdanie Stenograficzne z 5. posiedzenia Sejmu Rzeczypospolitej Polskiej w dniu 16 grudnia 2005 r. [16.12.2005]. Punkt 25. porządku dziennego: Informacja w sprawie planu legislacyjnego Komisji Europejskiej na 2006 rok (druk nr 120)*, pp. 253–280, here pp. 262–264.
28. Fischer, Manfred/Wetzel, Daniel/Müller, Peter (2006) Europa hängt an der Pipeline: Auf dem Gipfeltreffen der Industriestaaten (G-8) in St. Petersburg steht die Energieversorgung Europas ganz oben auf der Tagesordnung. Doch die Gegensätze sind zu groß für einen Erfolg, *Welt am Sonntag*, 16 July, obtained via Factiva, Document WSONNT0020060717e27g00053.
29. Deutscher Bundestag (2007) *Stenografischer Bericht, 109. Sitzung*, Plpr-Nr. 16/109, 6 July, pp. 11333–11334.
30. For a more detailed analysis of historical references in Polish energy security debates see: Siddi 2017; Heinrich 2007.

31. Sejm Rzeczypospolitej Polskiej (2005) *Kadencja IV: Sprawozdanie Stenograficzne z 107 posiedzenia Sejmu Rzeczypospolitej Polskiej w dniu 7 lipca 2005 r [7.7.2005]. Informacja bieżąca*, pp. 364–381, here p. 371.
32. Sejm Rzeczypospolitej Polskiej (2011) *Kadencja VII: Sprawozdanie Stenograficzne z 1. posiedzenia Sejmu Rzeczypospolitej Polskiej w dniu 18 listopada 2011 r [18.11.2011]. Punkt 10. porządku dziennego: Przedstawienie przez Prezesa Rady Ministrów programu działania Rady Ministrów z wnioskiem o udzielenie jej wotum zaufania*, pp. 57–152, here p. 121.
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4

Politics and Knowledge Production: Between Securitisation and Riskification of the Shale Gas Issue in Poland and Germany

Aleksandra Lis

1 Introduction

Debates on shale gas in Europe and in the USA have been studied by social scientists quite extensively already (Jaspal and Nerlich 2014; Cotton et al. 2014; Ocelik and Osicka 2014; Mazur 2014; Boudet et al. 2014; Evensen et al. 2014; Williams et al. 2017; Thomas et al. 2016). Existing studies point to the existence of two dominant frames in media discourses in various European countries: that of energy security and environmental risks (Upham et al. 2015; Jaspal et al. 2014). Polish and German debates have also been studied with regard to shale gas development. For example, some scholars point out that shale gas in the Polish media and political discourses has been mainly presented as a potential domestic fuel in the context of debates on the security of gas supply (Lis and Stankiewicz 2017; Upham et al. 2015; Wagner 2014; Jaspal et al. 2014). Others have shown that framing of environmental risks has been expressed only

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in local contexts and has been unable to influence the national debate (Lis and Stankiewicz 2017). The German debate on shale gas, much less prominent in the media and within the national political arena, has, conversely, concentrated more on environmental risks and especially on drinking water safety (Upham et al. 2015).

In this chapter, I examine Polish and German shale gas politics from the perspective of the securitisation framework that has been extended, by Heinrich and Szulecki (Chap. 2) in this volume in relation to energy, through concepts, such as politicisation, riskification, security jargon, de-riskification and de-politicisation. I compare three dimensions of the Polish and German cases: "opening" or "closing" of the shale gas issue for public debate, definition of the threat and the type of measures undertaken.

The first distinction allows us to demarcate politicisation and securitisation, whereby politicisation means "opening" an issue for a public debate and securitisation involves "closing" it away from the public (Buzan et al. 1998). The second dimension allows us to see whether there is a clear definition of a threat (securitisation), no clear threat is defined (security jargon) or the conditions of the possibility of harm/risk were constructed (riskification). Finally, the third dimension allows us to examine whether the proposed measures are exceptional in any way—that is, whether they constitute the breaking of/with norms guiding political practice, shifting power and competences and constraining access to information (see Chap. 2), which classifies as securitisation. Or whether in fact the political practice leads to programmes for permanent change aimed at reducing vulnerability and boosting the governance-capacity of the valued referent object itself (Corry 2012), which, in turn, counts as riskification.

Through this analysis, we also contribute to one of the unresolved questions in the securitisation debate (see Chaps. 2 and 6 in this book). Namely, whether the character of securitisation can be defined as a mere speech act or whether there are other means through which securitisation, or riskification, is communicated.

The examined cases show that scientific knowledge, and the different modes of its production, is an important part of both securitising and

riskifying politics. It is thus also through the construction of scientific facts, and through the discussion of their status in the policy worlds, that securitisation and riskification are achieved. Two different types of knowledge production—environmental risk assessment and environmental impact assessment—were organised in Germany and Poland, respectively. Each underpinned different politics and policy measures in these countries. In Poland, the political decision was "going all for shale" and the policy moves involved amendments of tax regulations and licensing procedures at the national level, as well as preventing any additional environmental regulations at the EU level. In Germany, the political decision was to put a moratorium on fracking at the national level and the policy choice was to prepare a new piece of legislation that, in the long run, would strengthen the safety of the environment and of the people.

Moreover, the analysed cases show that the actors involved imparted "more or less reality" to the knowledge that was produced. While the environmental impact assessment, according to the Polish actors, produced "empirical", "solid facts" about "the reality of fracking", the environmental risk assessment, according to them, merely generated "scenarios" about "the phantasy of fracking", which were in no way grounded in empirical reality. In other words, in the view of the Polish geologists and political actors, the empirical facts were "real" and risk scenarios were "speech acts". At the same time, the analysis clearly shows that this distinction was constructed as part of the politics around shale gas. The solidity and reality of empirical facts were brought into the debate as arguments against riskification of shale gas and backed up by the production of risk scenarios.

The chapter is organised as follows. In the next section, I outline the methodology used to collect and analyse data for the two case studies. In the section that follows, I give a brief introduction to the debates on shale gas in Poland and Germany, based on media analysis carried out within the research project on debates on energy security in these countries.[1] Further on, I examine the Polish case more deeply to show how processes of knowledge production intertwined with securitisation and deriskification of shale gas. In the following part, I analyse the German case. It shows politicisation and riskification of shale gas where the government

decided to institute a moratorium on fracking in Germany. I also examine how the risk assessment approach played a crucial role in shaping the German political debate and the policy process aimed at establishing a long-term framework for governing the extraction of unconventional hydrocarbons. These two parts are mainly based on document analysis and interviews. In the last section, I provide a discussion and some conclusions about how knowledge production is involved in debates on the security of energy issues.

2 Methodology

This chapter is based on empirical material gathered as part of two projects (footnote 1). I reconstruct shale gas debates in Poland and in Germany based mainly on media debates. The main written news outlets in Poland and in Germany were selected for this purpose,[2] all articles on shale gas using key words "fracking", "gaz z łupków", "Schiffergas" were collected and coded according to the securitisation criteria: "object threatened", "type of threat", "counter-measures" and "actor doing the securitization move". Additionally, a category "desecuritisation" was added as another possibility. This analysis is also based on document analysis and expert interviews. In total, seven interviews were carried out over two years between 2014 and 2016 in Warsaw and in Berlin. I interviewed one person in the Ministry of Foreign Affairs (Interview 1, Warsaw, May 2015), two people at the Ministry of the Economy (Interview 4, Warsaw, May 2015) and three in the Polish Geological Institute (Interview 2 and Interview 3, Warsaw, September 2015). I also conducted interviews in Berlin with an IGBCE expert (Interview 5, Berlin, June 2016) and two energy experts in the Bundestag (Interview 6 and Interview 7, Berlin, May 2015. The interview material served as a valuable source of information about the development of debates but it was also interpreted as demonstrating how the approaches to shale gas development and knowledge about its impacts on the environment were different in Poland and in Germany.

3 Shale Gas Debates in Poland and in Germany: An Overview

Shale gas became a topic of public debate in Poland in 2011 after the publication of a report entitled *World Shale Gas Resources: An Initial Assessment of 14 Regions Outside the United States* by the US Energy Information Agency (April 2011). The report assessed the Polish shale gas resources to be the largest in Europe and the latest updates confirm this potential.[3] However, the first concessions for exploration activities were issued as early as 2007. The word that most accurately sums up the atmosphere around shale gas in Poland is "hope". This hope was expressed by the government officials of the time and it invoked images of economic prosperity, huge budget revenues, money for a Norway-styled Sovereign Wealth Fund, a Pension Fund and the security of energy supplies (based on media analysis). But even though this vision was so overwhelmingly positive, it soon became mixed with fear. The fear congealed in various formulations of threats which came from disparate directions: mainly from Russia, but also from the use of the technology for hydraulic fracturing or from shale gas opponents.

The year 2012 was abundant with different events that were formative for the discourse and political decisions on shale gas in Poland. The peak for exploration activities could be noted in that year with 24 drilling operations completed. The year 2012 also saw the highest number of local protests in Poland, in the North and South of the country alike. At the time, most attention was devoted to local communities and their fears which resulted in the launching of a dialogue programme called "Together about Shale Gas", which involved more than 10 communities in three different voivodships in the Northern parts of Poland that were covered with shale gas exploration licences. However, it was also in 2012 when one of the biggest players in the shale gas game, ExxonMobil, withdrew from Poland. And while the local protests and local fears about possible environmental degradation became more visible, it was the move of the global oil & gas giant that turned out to be more significant for the political decisions of the Polish government. The Polish Prime Minister replaced the Minister of the Environment and gave a clear message to his cabinet that a faster pace of

taxation legislation and easier licensing procedures was expected. Two pieces of legislation were finally adopted by the Parliament in 2014 and in 2016—the Law on Special Taxation of Hydrocarbons and the amendment of the Geological and Mining Law. However, they came into force at the moment when the Polish shale gas project started to slow down, mainly due to low oil and gas prices on global markets and the difficult geology of the Polish shale rock—the rock contained a lot of clay that made it inefficient to extract gas. As the drilling was going on, the Ministry of the Environment commissioned the Polish Geological Institute (PGI) to carry out an empirical study on environmental impacts in seven different locations. In some locations the exploration licences were held by Polish companies and in others by foreign ones.

In Germany, the debate on shale gas was different. The promise of a new resource was neither as great as in Poland[4] nor as politically enticing for the German government. Germany does not perceive relations with Gazprom as threatening but rather sees that company as a reliable business partner. Therefore, relations with the Russian Gazprom did not play an important role in shaping the German hope for shale gas extraction. Besides, German energy policy is currently mainly focused on its own energy transition (*Energiewende*) and the phasing out of nuclear energy. Shale gas is thus discussed as just another issue to be related to energy transition and not as a potential game-changer. The German coalition government placed a moratorium on the use of hydraulic fracturing technology in Germany in 2014, and from the very beginning, it focused on environmental risks related to this technology. In October 2010, *Der Spiegel* published an article where, after a short introduction about the great potential of shale gas reserves worldwide, the authors discussed the risks. The main risk discussed in the German media, according to our analysis, was shale gas impact on climate change. The levels of CO_2 emissions were discussed in relation to different types of energy sources and energy producing technologies. The printed media outlets that were analysed made no mention of Russia or Gazprom. However, much attention was devoted to shale gas impacts on the environment and the landscape. The questions asked in the media concerned local impacts that could irreversibly change idyllic landscapes or contaminate the environment with fracking and post-fracking fluids. In this debate, technology for

fracking, rather than the resource itself, was placed centre stage. Hydraulic fracturing was represented as controversial and carrying unknown risks.

Next to environmental risks, the German media stressed economic benefits related to shale gas development worldwide. It was mainly *Der Spiegel* and *Die Süddeutsche Zeitung* that discussed various threats related to a growing demand for gas and that saw shale gas as a chance for improving Germany's economic competitiveness. There was also a considerable amount of space devoted to how the shale gas boom in America impacted on local as well as global gas prices. While the media debate revolved around the issues mentioned above, the political debate, from quite early on (2010/2011), focused on the fundamental question of whether fracking should be allowed or banned. As a moratorium was placed on fracking in 2013, new legislation regulating fracking in Germany started to be discussed. In April 2015, the coalition put forward a draft law on the issue of shale gas and in June 2016, a law banning frackng was finally approved—with a few exceptions for fracking for scientific purpose. Also, the behaviour of companies operating in Germany was different than in Poland. While Chevron's activities in the South Eastern parts of Poland mobilised a strong opposition to shale gas exploration, in Germany ExxonMobil tried to engage the public in a discussion about the risks of fracking. In April 2013, ExxonMobil Germany organised an expert panel on fracking that worked for the whole year to collect various types of evidence and scenarios in order to discuss them with numerous stakeholders and then finally gather them together in a publically available report. The Federal government, in the proposed shale gas law, also planned to put together a panel of experts that would discuss areas where more research on the environmental risks of fracking was needed.

4 Shale Gas in Poland: Hoping for Energy Security and Collecting Facts

The shale gas issue became the responsibility of the Ministry of Foreign Affairs in an international context, as it was considered primarily an issue of energy security. This was a strange political decision from the perspective

of the EU institutions, since other member states were represented by Ministries of Energy, the Economy or the Environment, or by their country's geological service. An official from the Ministry of Foreign affairs explained that Poland's energy situation was very particular as the issue of energy security was of prime importance—as shown by the significance of geopolitical relations with Russia and a strong dependence on Gazprom's gas supply.[5] This clearly exemplifies a securitising move as the involvement of the Ministry of Foreign Affairs was an extraordinary measure. The first note about shale gas was written by a staff member in the Ministry of Foreign Affairs in 2009. Led by Radosław Sikorski, the Ministry worked towards popularising the view that shale gas development in the USA could be replicated in Europe together with its positive consequences for the economy and the security of supply.[6] The Ministry also cooperated closely with Polish and international companies operating in Poland and was involved in various negotiation and lobbying activities in the EU until the beginning of 2014 when the European Commission issued the Communication on Exploration and Production of Hydrocarbons (2014/70/*EU*).[7] Cooperation between the Ministry of Foreign Affairs and the Ministry of the Economy was strong. There was also an exchange of information with the Ministry of the Environment which grants exploration licences for shale gas.[8]

Quite early on, in 2010, the Ministry of the Environment, through one of its agencies, the General Directorate for Environmental Protection (DGEP), commissioned the first study in Poland to examine whether the fracking companies abide by the rules and administrative procedures that regulate mining activities. It was carried out by the Polish Geological Institute (PGI). This study focused mostly on administrative rules and did not measure the impacts of exploration on the environment.

The first empirical study on environmental impacts of shale gas extraction was also commissioned by the GDEP and was carried out by the PGI at the site called Łebień. The report was published in March 2012 and it did not reveal any negative impacts of hydraulic fracturing on water or soil (PGI 2012). However, the researchers from PGI indicated in their conversations with the Ministry of Environment that the management of waste was likely to be the main challenge in the exploration phase.[9] This conclusion was not written down in the report, as according

to our interviewees, it was only a summary of research results and was not supposed to include any recommendations.[10] The geologists recalled that before the public launching of the Łebień Report, the Ministry organised a number of meetings to discuss how to get the message across to the general public that shale gas exploration was safe.[11] This is an interesting point to reflect on in the context of securitisation and riskification. It indicates that while the Polish government was eager to securitise the issue of shale gas, it was very reluctant to riskify it. Different measures are associated with each move and the Polish government saw riskification as a precondition for introducing additional environmental measures—a move to be avoided if shale gas was to be extracted cheaply and swiftly in Poland. What we observe in this case is rather a process of de-riskification of the shale gas issue in Poland through engaging in knowledge production in order to give the governmental institutions the certainty that nothing bad can happen when shale gas is produced.

The Łebień Report was translated into English and is available on the PGI's website in two languages. The PGI experts presented the results of their study to the Joint Research Centre (JRC) in Brussels in 2013 so the other European geological services were aware of the existence of this report. However, as the Polish geologists recall, none of the country representatives showed any interest in the report beyond that meeting. No questions came from German or Dutch colleagues. At the same time, according to them, the Ministry did not make nearly enough use of the report in political arenas—not in Poland, in international relations with other European countries or with the EU institutions in Brussels. Some Polish MEPs asked questions in the European Parliament inquiring why the reports had not been used in the shale gas debate at the EU level. However, the Ministry of Foreign Affairs did use some parts of the research results, particularly on seismicity, in order to prove that there were no seismic risks in Poland.[12]

In the summer of 2013, the PGI presented results from the studies carried out in seven other locations. However, for security reasons, the names of drilling sites were classified by a governmental security agency. This can be seen as yet another securitising move. The PGI experts were not able to obtain any clarification for this extraordinary measure, which made it difficult for them to conduct their fieldwork. While collecting

soil and water samples in the studied locations, they were not able to explain to the local people what they were doing and for what purpose. This gave rise to even more distrust around their activities and people started to suspect that the government was doing something to extract shale gas in secret and against the wishes of its citizens.[13] Five of the studied locations were declassified only at the end of 2015 before a conference in Brussels took place, at which the reports were presented to the European public. This de-securitising move was thus taken, not in front of the Polish citizens or in relation to them, but in front of the European public. It was the EU that the government found most important to present the research findings to. In fact, as the PGI experts explained, it would make little sense to discuss results from a local empirical study without giving the names of the locations.

This time, the reports proved crucial for the work of the Ministry of the Environment which "was taking the PGI reports everywhere it went and was referring to their results in each and every discussion about shale gas regulations".[14] One of the main PGI experts pointed out that the PGI studies are of unique value in Europe, maybe even in the world, because they show "what we really know about the impacts of shale gas exploration".[15] In some of the locations, the impacts were measured against the baseline study—that is a study carried out before any hydraulic fracturing operations were authorised. No such study has ever been done in the USA, which makes it difficult to actually measure the impact of hydraulic fracturing on the environment there. The Polish studies also contributed important data to the work of an expert Network on Unconventional Hydrocarbons that was created by the European Commission in Brussels in the second half of 2014. The data collected by PGI, and the analysis carried out in these reports, were used in the final report of the Network. In all these instances, we can see that the data collected and the analysis carried out by the PGI were used to de-riskify the issue of shale gas, mainly at the EU level. The Polish governmental officials connected the strategy of securitisation—of taking extraordinary measures to protect prospects for shale gas exploitation from additional hurdles of environmental regulations at the EU level and from the interference of the hostile citizens' groups—with the de-riskification measure in order to show that everything is absolutely fine when you drill and frack in Poland.

The Ministry of the Economy also used the PGI reports in its own work. For this Ministry, as with the Ministry of Foreign Affairs, issues of energy security and market competitiveness were of prime importance. However, here the discourse of energy security was less politicised and more looked at from the market perspective. One could say that even "security jargon" was less deployed by the Economy Ministry's officials. The interviewed staff members were of the opinion that the more gas that is produced domestically and the more gas there is in general on the markets, the better it is for the security of energy supplies in Poland.[16] One can see that energy security is not defined here against any perceived threats but rather as a function of a fluid market. At the same time, the Ministry used the PGI reports to prevent any riskification. According to the Ministry, these were important analyses that showed that shale gas extraction was safe. Moreover, the value of the PGI reports was seen in the fact that they were the only ones that were based on empirical measurements. This made them "reliable and reflecting the reality".[17] The other European reports, according to the Ministry's experts, were based on prognoses, on assumptions and risk assessments—they did not reveal anything about the reality because no country other than Poland was actually doing something in the ground and measuring the impacts. No one was drilling and thus no one was able to measure the impacts of drilling and hydraulic fracturing on the environment. According to the officials, all the fears about water pollution and fracking fluids leaking into drinking water reservoirs were laid to rest in the PGI's studies. "And we have the scientific proofs for that, the only ones in Europe".[18] This argumentation shows again, quite clearly, that de-riskification was backed up by the PGI reports, by the facts that were produced there, and that it was directed against any additional environmental measures that could come from the EU or any hostile actions from environmental groups.

Another important moment that revealed the distinction the Polish government made between measured facts and hypothesised risks, in order to de-riskify shale gas exploration, came in 2014. At that time, the government had just passed a regulation that raised the obligation to carry out an environmental impacts assessment study (EIA) for boreholes up to 5,000 metres deep. An EIA is required in the EU before any deep drilling is carried out by a company. According to the European

Commission, a "deep" borehole is one that extends beyond 1,000 metres. Not only does the EIA have to analyse the potential impacts of mining activities in a given area, but the EIA report also has to be made available to the general public for consultation before it is accepted by the public administration. It is thus not only a risk assessment but also an exercise in public consultation as it grants citizens the access to environmental information. The PGI was consulted about this piece of legislation as well. And even though a consensus was not reached among the PGI experts, the official explanation for taking the 5,000 metres level as the borderline below which an EIA is mandatory, maintained the judgement was grounded in "facts". One PGI expert explained that, back in socialist times, companies drilled all over Poland. From those years, mainly the 1960s and 1970s, the PGI has a rich collection of documented drills from over 16,000 locations. These drills are over 1,000 metres deep and, based on this documentation, it is fairly well known what the Polish geology is like. "We really do know what to expect down to 5,000 meters underground. Beyond that level, however, we can expect some surprises, we have to start theorizing about the geology beneath that level".[19] However, the European Commission did not accept this legislative decision taken by the Polish government. The Commission sued the Polish government for raising the mandatory EIA for deep boreholes. The case is currently in the European Court of Justice and no ruling has been made so far (August 2017).

5 Shale Gas in Germany: A Risk Assessment Approach to the Environmental Impacts of Fracking

At a time when it had still not been decided whether drilling for shale gas would be allowed in Germany, ExxonMobil, one of the global oil & gas companies interested in German shale gas, launched a consultation process with stakeholders and experts in order to assess potential health and environmental risks related to shale gas extraction. The process started in April 2011 and ended with an extensive report published in April 2012.

The investigation revolved around water safety. First, a wide number of questions were collected from citizens, municipalities and water companies and a review of the existing studies carried out. A study visit to the USA was made in order to talk to the affected communities and the competent authorities there. The work was carried out by the company's specialists and then reviewed by the German and international experts to evaluate its robustness and scientific quality. From the very start, ExxonMobil assigned itself a role in providing funding for the study and in supplying data but it refrained from making any comments on the final report. The panel's scientific director was Dr. Dietrich Borchardt, who works at the Helmholtz Centre for Environmental Research—UFZ, which is the largest environmental research institution in Germany, and nearly 40 experts were involved in writing the report. On the report's first page, the authors admit that their research has revealed the existence of both serious and minor risks of hydraulic fracturing (Ewen et al. 2012, p. 3). The other important objective of the expert panel's work was to involve the public and to create conditions for a dialogue. At different stages of the process, different stakeholders were asked to comment on the methodology, results and questions. The analyses of the expert panel focused in particular on worst-case scenarios:

> i.e. events that are extremely unlikely to occur but which, given the right confluence of unfortunate circumstances, could in fact occur – for example continuous underground fault zones that neutralize the compression effect of geological barriers; critical underground tectonic stress that could potentially damage a hydrofracking well; accidents; technical failures; and human error. (Ewen et al. 2012, p. 4)

The ExxonMobil expert panel exemplifies a riskifying move with regard to the shale gas issue in the German context. It is an interesting case when a private company, the industry, is initiating this move and is eager to hypothesise about potential risks and worst-case scenarios without having any empirical data to actually test these hypotheses. The rationale for this approach was that "a technology should only be used if you're sure that you can get a handle on the worst scenarios to which that technology may give rise; and to do that, you need to know these

scenarios backward and forward and understand them to the full" (Ewen et al. 2012, p. 4). In other words, the assumption was that only when one can be sure about the possibility of the most dreadful scenarios occurring can a given technology be used. The process of generating data was not based on conducting empirical measurements but on constructing models and on modelling hypothetical data and hypothetical processes. In the reports, the experts also explained the limitations of this methodological approach:

> While general findings can be obtained through modeling, these results require validation. Models are particularly useful in cases where quantitative measurements are scarce, or where such measurements would be difficult to perform – for example for long term safety or very deep underground areas. Models provide a basis for the formulation of general recommendations, but in certain cases show that the available information is too meager to allow for the description of specific effects. Genuinely sound scientific findings are only obtainable if measurements for a specific site are available that would close the existing knowledge gap and demonstrate the validity of a given simulation model. (Ewen et al. 2012, p. 20)

Every section of the report where results were presented had a separate box entitled "the (possible) shape of things in 2030", which hinted that the thinking about shale gas extraction went way beyond the exploration phase. The report offered options for hydrofracking risk management, including monitoring, safety management, criteria for chemical selection, liability and accountability and statutory considerations. The recommendation section started with a statement that recommendations were conditional on a political decision to extract shale gas in Germany but the report did not discuss whether such a decision was likely. The recommendations involved excluding hydrofracking in selected areas, taking a slow and careful approach using various monitoring techniques, social dialogue with stakeholder groups, regional management, strengthening and improving the hydrofracking regulations and more research and development (Ewen et al. 2012, pp. 55–62). However, it was stated clearly that shale gas is seen as a viable option for Germany by ExxonMobil, though no reference to energy security was made.

The work of the expert panel was thus not about producing empirical observations based on real-life situations in order to conclude whether a technology can be safely used, but rather about producing hypothetical scenarios and assessing the robustness of the existing regulations and institutions to be able to deal with these worst-case situations. This conforms to the logic of riskification which demands special measures be taken to increase the robustness of regulative frameworks and institutions in order to safeguard environmental and public health. According to an energy expert in the Bundestag, there was broad social and political consensus that, despite the long history of fracking in Germany, should any new knowledge about the risks of hydraulic fracturing come to light, new regulations had to be put into place.[20]

For a short time, for less than a month at the beginning of 2013, the new government of Angela Merkel planned legislation that would allow hydraulic fracturing outside of wetland areas. However, the severe critique that came from the opposition, as well as the governing parties and NGOs, made the chancellor change her mind and a moratorium on fracking was put in place. One of the impulses for the revival of the discussion on shale gas in Germany in 2014 was the war in Ukraine. It might have been the only moment in the German debate when concerns about energy security were raised in relation to shale gas.[21] However, contrary to the Polish case where I specified securitising moves that involved extraordinary political measures, in this instance, we can rather speak of the prevalence of security jargon. No unusual measures were proposed, nor introduced in Germany under the circumstances of the Ukrainian war. In general, according to our interviewee from the Bundestag, it was always very unlikely that shale gas was going to be produced on commercial scale in Germany. The simple reason was that German policymakers do not seem to see much need for this gas and it is not perceived as important for Germany's energy security. It was also known that various fracturing technologies for unconventional gas have already been used in Germany to exploit tight gas.[22]

The work on the shale gas legislation started soon after the moratorium was passed. The debate divided the political scene in Germany over various topics. There was, however, a general feeling that the conditions for passing the regulation were very difficult as it was about regulating something that

the majority of the society did not want at all.[23] Heavy lobbying took place by the German oil & gas producers associated in WEG (Association of German Oil and Gas Producers) who were against any strict environmental and safety standards appearing in the shale gas law.[24] The main issues of debate around the proposed legislation concerned the safety of drinking water reservoirs and the division of competence between the federal government and the Land government. The main stakeholder concerned with drinking water safety was the German environmental NGO, NABU (Naturschutzbund Deutschland). Demands to guarantee that there were no risks, especially to the drinking water, were also made by trade unions, for example, IGBCE[25] and also the SPD.[26] Several Lands introduced their own moratoriums on using hydraulic fracturing despite the fact that if the federal law came into effect, it would override the regional bans. Therefore, the Lands were lobbying for the opt-out clause to be included in the law, in case they stood against the federal government's decision. However, since mining licences are issued by Land governments, a Land can prevent shale gas exploration from happening on its territory anyway. Though not bereft of controversies, heated debates and political bargaining, the general political move made by the German political parties was to riskify the shale gas issue. With the legislation, riskification went beyond mere jargon, and involved crafting a new institutional order for protecting the environment and the people.

Another important point in the debate on shale gas legislation in the Parliament concerned the question of whether the Parliament itself should be responsible for demanding more scientific research on shale gas or whether a separate expert body should be created for this purpose. The worry concerned the possibility that the scientific committee might overrule Lands' decisions on permitting or disallowing future fracking operations. The debate centred on the issue of how much input Parliament and Land governments should have in such decisions. The conclusion arrived at was that there should be a commission of experts established and that the Parliament is not an authority in scientific matters related to shale gas extraction. The commission would comprise the Umweltamt experts, WEG representatives and other established professionals from environmental institutions and research centres. This only strengthened

the riskification of shale gas, as a special measure/body was established in order to evaluate potential risks and the knowledge about them.

In June 2016, the law was finally passed. The law banned any production of shale gas and oil. In the first draft, hydraulic fracturing at levels deeper than 3,000 metres was allowed. In the finished piece of legislation, even this was banned. Four test drills for using hydraulic fracturing are planned, however. They will study the environmental impacts of fracking and permission for drilling will be given by the Bundesland in the Land where this operation is supposed to take place. Moreover, experts from public authorities and research institutions will monitor the test sites and provide annual reports to the German Bundestag. In 2021, the Bundestag will reassess whether the ban on unconventional hydraulic fracturing should continue. To ensure transparency, the reports of the expert commission will be published online.

6 Discussion and Conclusion

The shale gas issue seems to have brought to light some big differences between Poland's and Germany's approaches to gas supply as well as to their attitudes towards techno-scientific development more generally. This can be clearly shown through the concepts of securitisation, security jargon, riskification and their opposites. While for the Polish government, prospects of domestic shale gas production were immediately inscribed into the discourse of energy security and granted high priority, for the German government, shale gas was not seen as an important contributor to the security of energy supply. Thus, while the Polish debate revolved around the issues of energy security and economic prospects, in Germany it very quickly honed in on environmental risks. However, what one could see through this analysis was that Polish and German shale gas politics was not merely about the debate and issue framing; it also involved taking measures to protect particular objects against perceived threats. In Poland, the government chose to protect the prospects for shale gas exploration, the hope, the dream, the future security of energy supplies, against potential enemies. These enemies—the identified

threats—were the environmental regulations that could come from the European Commission and the protest actions of particular citizen groups, such as environmental NGOs and anti-fracking community groups.

Interestingly, even though the media discourse tended to frame Russia and Gazprom as threatening shale gas extraction, no extraordinary measures were taken up in order to protect Polish interests against the Russian threat. In this case, we can speak of security jargon—the Russian threat was potential and hard to substantiate and pin down to particular actors, events or processes. On the other hand, in this security jargon, through speech acts, everything could become a Russian conspiracy: environmental NGOs, community protests, European Commission legislation. Simultaneously, the government strived hard to de-riskify the shale gas issue. Environmental and health safety that could be proven and empirically measured was an important part of the strategy to head off any additional environmental legislation. In order to achieve this, the government needed "hard facts" and the PGI was the institution to produce them.

In Germany, on the other hand, one could observe how the government and the companies chose to politicise and riskify the issue. The ExxonMobil expert panel showcased the right approach to environmental risk assessment for shale gas and to public engagement in technology assessment for the whole EU. Instead of shielding the debate on shale gas from the public, as Polish government did (by, for example, classifying information on sampling locations), the German business and political actors opened the debate to the public. At the same time, the acknowledgement of the existence of risks was not limited to a political statement. It was also supported by studies, by building worse-case scenarios and by analysing the robustness of the German regulatory and institutional systems.

What this analysis has shown is thus not only two different directions in hydrocarbon politics (unconventional) in Poland and Germany but also that each country's policy choice—to explore or to ban—was underpinned by different types of knowledge production and different epistemic regimes (Jasanoff 2005) that determine the kind of knowledge that will be perceived as viable and valuable for the State's political choices.

German debates on techno-scientific development very often focused on risks, not only on the purely technical risks but also on more complex socio-technical risks. For example, Chancellor Merkel established an ethical committee to discuss the risks of the German energy transition—*Energiewende*. The committee comprised trade union representatives, philosophers, representatives of the Protestant Church, social scientists and only two people connected to business. The main objective of this committee was to discuss whether any risks, beyond the technical ones, exist and, if so, is German society willing to take them? At the same time, as my interviewee, who was a part of this committee, pointed out, any outcome of such a debate cannot be an absolute decision. It is only the result of a debate within a given society and it cannot be extended to other societies. For example, French society might prefer nuclear power (Interview 3, Berlin, June 2016). No such committee, or even a temporary panel on the socio-technical risks of techno-scientific projects, has ever been established in Poland. The notions of risk and ethics are absent, or at best marginal, in the Polish debates on techno-science (Mucha 2009). Also, the need for more research that was identified by some of my interviewees did not actually point to measuring the environmental impacts in particular localities but was rather about studying whether it is possible to exclude any risks. The ethical dilemma is a different question that implies a different perspective and methodology for scientific inquiry than the ones presented in Poland. While the Polish governmental and scientific institutions focused their efforts on collecting evidence from drilling sites, their German counterparts wanted to analyse whether the risks can be managed within the existing legal systems.

Another substantial difference in the approaches to shale gas development in Poland and Germany could be seen in the way the two governments regarded the role of the public. While the Polish government decided to classify the names of the drilling sites at which the PGI scientists carried out their measurements, in Germany the debate was open to the public. The research sites in Poland were classified for security reasons and, for example, the ExxonMobil expert panel was open to interventions and contributions from the public and stakeholders. Also in the law passed by the Bundestag, future reports on environmental impacts were supposed to be open to public and freely accessible on the

internet. This shows that securitisation of shale gas in Poland was implemented in opposition to possible threats coming from Polish citizens, different stakeholder groups and communities. The state saw these actors as threatening shale gas development in Poland, which was considered a security issue at the highest level of the state. This indicates the importance of further reflection about the level of trust Polish state institutions have towards their country's citizens in areas such as energy policy.

Notes

1. One project, titled "Towards a common European energy policy? Debates on energy security in Poland and in Germany", was financed by the Polish-German Science Foundation and the other, titled "Shale gas as a new challenge for Europe: Re-thinking the role of expertise in European integration processes", was financed by the Polish National Science Centre, project number UMO-2013/11/D/HS6/04715. I would like to thank all the interviewees for offering their time and expertise.
2. In Poland: *Gazeta Wyborcza* (daily), *Rzeczpospolita* (daily), *Polityka* (weekly) and *Wirtualny Nowy Przemysł* (business monthly); in Germany: *Frankfurter Allgemeine Zeitung* (daily), *Süddeutsche Zeitung* (daily), *Der Spiegel* (weekly), *Die Zeit* (weekly).
3. According to the latest data (May 2013), there is 145.8 trillion cubic feet of unproved technically recoverable wet shale gas https://www.eia.gov/analysis/studies/worldshalegas/
4. According to the latest data (May 2013), there are 17 trillion cubic feet of unproved technically recoverable wet shale gas https://www.eia.gov/analysis/studies/worldshalegas/
5. Interview 1, expert in the Ministry of Foreign Affairs, Warsaw, May 2015.
6. Interview 1, expert in the Ministry of Foreign Affairs, Warsaw, May 2015.
7. Interview 1, expert in the Ministry of Foreign Affairs, Warsaw, May 2015.
8. Interview 1, expert in the Ministry of Foreign Affairs, Warsaw, May 2015.

9. Interview 2, expert in the Polish Geological Institute, Warsaw, September 2015.
10. Interview 2, expert in the Polish Geological Institute, Warsaw September 2015.
11. Interview 2, expert in the Polish Geological Institute, Warsaw, September 2015.
12. Interview 1, expert in the Ministry of Foreign Affairs, Warsaw, May 2015.
13. Interview 3, expert in the Polish Geological Institute, Warsaw, September 2015.
14. Interview 3, expert in the Polish Geological Institute, Warsaw, September 2015.
15. Interview 3, expert in the Polish Geological Institute, Warsaw, September 2015.
16. Interview 4, experts in the Ministry of the Economy, Warsaw, May 2015.
17. Interview 4, experts in the Ministry of the Economy, Warsaw, May 2015.
18. Interview 4, experts in the Ministry of the Economy, Warsaw, May 2015.
19. Interview 3, expert in the Polish Geological Institute, Warsaw, September 2015.
20. Interview 5, energy expert at IGBCE, Berlin, June 2016.
21. Interview 7, energy expert in the Bundestag, Berlin, May 2015.
22. Interview 6, energy expert in the Bundestag Berlin, May 2015.
23. Interview 6, energy expert in the Bundestag, Berlin, May 2015.
24. Interview 6, energy expert in the Bundestag, Berlin, May 2015.
25. Interview 5, energy expert at IGBCE, Berlin, June 2016.
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5

Energy Security and Energy Transition: Securitisation in the Electricity Sector

Kacper Szulecki and Julia Kusznir

1 Introduction

Ageing infrastructure, technological innovation as well as the need to tame energy sector carbon dioxide emissions to protect the climate—all these are pushing national energy systems towards some kind of a *transition*. In the early twenty-first century, "energy transition" or "transformation" has become shorthand for increased penetration of renewable

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energy sources, very often dispersed, and contrasted with the centralised fossil-based systems of the past. What remains somewhat under-researched are the security implications of that shift (Månsson 2016; Nie and Yang 2016).

This chapter provides a comparative empirical analysis of security-related debates in two neighbouring countries—Germany and Poland. The theme of energy transition becomes central because we focus our attention on key elements of that shift: renewable energy as well as grids and nuclear. "New" renewables are perceived as the technology of the future, on which decarbonised systems will be based (Szulecki 2015), while cross-border interconnectors are absolutely vital for regional energy governance and using geographic synergies to maximise the benefits of renewable-based generation. However, they are also a particularly politically sensitive type of electricity infrastructure (Puka and Szulecki 2014b). On the other hand, nuclear is in many contexts described as their main low-carbon competitor, but raises other important environmental concerns.

What unites these issue areas is that they are all elements of the electric power system.[1] Energy security studies have usually remained disinterested in electricity, which is somewhat surprising, given that the power sector is arguably the most vital energy system in modern societies. The ultimate threat to the system—a blackout, that is a sudden power outage covering a city, a region or possibly an entire national electric system—may have various negative effects for core services, including healthcare, transport, heating/cooling, and so on.

The 1977 New York blackout completely paralysed this megacity, necessitated the evacuation of the subway, blocked road tunnels (due to the lack of ventilation) and cut communication, also for the fire department and the police, which resulted in several fires and an eruption of lawlessness, including riots and mass looting. The 2003 Northeast blackout had broader repercussions, covering several US states as well as the Canadian province of Ontario. With the vital electricity system down, the spontaneous switch to candles as a source of light during the night is reported to have caused some 3000 fires, while the power outage itself contributed to doubling the usual number of emergency calls and a dozen directly related fatalities. In November 2006, a seemingly routine event

in Lower Saxony—the passage of a cruise ship under a high-voltage transmission line, which had to be switched off for that purpose, caused chaos throughout Western Europe leaving millions of people without power (Kemfert 2013). In a more international context, closer to the usual interests of Security Studies, the Crimea blackout of November 2015 caused a complete power cut from mainland Ukraine to the Russian-annexed peninsula—resulting in claims that electricity has been used as an "energy weapon" (Bråten 2017).

The uniqueness of system-wide power outages is in their sudden character—leaving the population largely unprepared—and the crosscutting, all-encompassing nature of electricity in modern (post)industrial societies. In some situations, faced with a power outage, people have no alternative sources of energy and have to cease economic activity, resign from mobility and do without important services. It is therefore quite clear that a power outage is a security problem, affecting not just particular populations, but also important *values* (compare: Cherp and Jewell 2014). Due to its ability to sustain vital services closely associated with important human values, the power system might be the most important one to protect in many modern developed states.

How is security discussed in relation to the power sector in the context of an ongoing (or pending) energy transition? Which elements of the electricity sector are securitised, why and by whom? What is the interplay of risk and security discourses in the complex technological discussion, for example, relating to distributed renewables and nuclear? We look at Germany and Poland to shed light on these issues. This chapter does not have the ambition to be comprehensive in discussing the problem of electric power security and securitisation. It does, however, signal some observations which can be used in future studies.

Applying the theoretical framework drawing on the Copenhagen School's securitisation model (as laid out in Chap. 2), we analysed the way security concerns are articulated in each of these closely connected but nonetheless separate issue areas. Our evidence comes from interviews and a broad media research, as well as a desktop analysis of secondary sources. Forty-seven semi-structured interviews were conducted with state representatives, including the members of the Polish Sejm, the German Bundestag and the Ministries of Economy and Foreign Affairs,

energy companies, energy experts and environmental NGOs in Warsaw and Berlin between February 2015 and January 2016. The goal of the interviews was to probe relevant policymakers and experts on their perspectives on energy security, and tracing elements of securitised discourses related to the energy sub-sectors as well as the suspected acceptability of securitising moves. This provided some additional depth to the board media analysis, which covered 3236 hits in over 1000 articles published by 9 major newspapers in Germany and Poland. Country experts coded these hits for the elements of the securitisation model present (e.g. threat, referent object, measures proposed) allowing for comparison and surveying the general "public debate" on security in these issue areas.

Drawing on these two data-gathering methods, we discovered that energy "securitisation" seems to be a mechanism pulling in quite different directions in Germany and Poland (and in these three areas). We find that in Poland, a link between energy policy and national (in)security makes energy policy debates regarding the power sector and energy transition unique. Discussions around renewables not only focus on pro-security arguments and systemic risks—as is the case in Germany—but also contain a national security thread related to notions of energy autarchy as well as economic sovereignty undermined by imported technologies, materials and know-how, and additionally cross-border energy exchange. Debates around nuclear resemble those about shale gas (as described by Lis (Chap. 4) in this volume), where German riskification of nuclear reactor operation is met in Poland with arguments about energy independence and national security.

2 Background: Polish and German Electricity Sectors

For a long time, Poland and Germany followed a similar path of development in the area of energy, both benefiting from rich domestic coal endowments. While in the 1950s and 1960s both Polish and German scientists and engineers experimented with nuclear reactors, it was only the German Democratic Republic (GDR - East Germany) that moved to

the phase of large-scale industrial civilian use of atomic power (with the Rheinsberg Nuclear Power Plant). The Federal Republic of Germany (FRG - West Germany) soon followed suit, and after the reunification, only Western reactors were kept operational, seen as technologically more advanced and reliable.

At the beginning of the 1990s, Germany generated over 68% of electricity from fossil fuels, mainly lignite, and further 28% from nuclear power plants, adding up to 96%. In Poland, 98% of the power was generated in coal-fired power plants (IEA 2013, 2016). In both cases the role of renewable energy sources (RES) was minimal, and so the systems—even if based on different generation technologies—were governed in a similar way: centralised and founded on large, industrial power plants.

However, over the following two decades the share of electricity generation from renewable sources has increased in both countries. As for 2015, it was up top 14% in Poland (IEA 2017a) and 31% in Germany while the IEA average equalled 24% (IEA 2017b). Merely focusing on an increased share of energy from renewable sources in the power mix does not show the full picture as the kinds of renewable energies developed in each of these countries and their impact on the energy sector was very different. In Germany, the increase in the RES production resulted mainly from the development of wind and solar photovoltaic (PV) energy, which led to the development of a brand new sector of the economy (around wind and PV manufacturing and installation), with several hundred thousand new jobs and an annual turnover of almost 17 billion euro (AEE 2017). In the case of Poland, over a half of the energy acquired from formally renewable sources came either from biomass co-firing in coal-fired power plants, or from large hydroelectric plants built before the 1990s (IEA 2016: 97), leaving "new renewables" as only an addition. Onshore wind energy has seen some significant growth, but remains at the level of 11 TWh or 7% of total electricity generation (IEA 2016: 97).

These differences can be seen as both the result and an additional factor causing the divergence in energy security perceptions. In the Polish political discourse, the idea of coal as the country's "black gold" and the foundation of energy interdependence is quite prominent (Sutowski

2015). It is not unfounded, as Poland has one of the lowest levels of import dependence in Europe. In 2013, it imported 25.8% of energy resources (EU average—53%). Germany in turn has been used to energy imports for many years and prefers to use its geographical centrality to maintain the role of an energy hub, which builds its energy security on exchange, interdependence, and abundance.

As a result, Polish energy policy has for years been constructed on the need to safeguard coal and the system in which it plays a crucial role. In that centralised paradigm, the construction of a nuclear power plant has been seen as both an element of energy diversification and a strategy for decarbonisation which does not interfere with the way the system is organised and governed (centrally and with large, stable, conventional baseload). Germany's 2011 *Atomausstieg*—the decision to phase out nuclear by 2022—stands in stark contrast to Poland's declared nuclear ambitions.

Distributed renewable energy generation is seen as a radically different kind of energy source, and meets important opposition. Germany's ongoing *Energiewende*—with its visible successes in terms of the scale of wind and PV installation deployment, but also important questions about costs, system stability and the impact on the political economy of the energy sector (e.g. the large financial losses of the incumbent utilities)—is a double lesson, showing what can be achieved but also what decision-makers and stakeholders might want to avoid (Ancygier and Szulecki 2014).

Finally, both Germany and Poland experience problems with the existing electricity infrastructure (Puka and Szulecki 2014a). In Poland, the transmission and distribution grids are in poor condition, undercapitalised and in many regions too scarce to serve the population and the industry. In Germany, the decades of separation between the West and the East are still visible, as the few existing links between the former GDR and FGR resemble interconnectors between separate national systems. This becomes a growing problem in the context of expanding renewable deployment—often in areas of low population density and poorer power infrastructure. Combined with a trading system that does not reflect actual power flow possibilities—having not only Brandenburg and Bavaria in the same bidding zone, but also Badenia and Austria—this results in

frequent uncontrolled electricity "loop flows" where German power moves from North-East to the South through the Polish grid (Ibidem).

The following sections try to separate energy security debates in two sub-sectors of the power system. First are renewables—which are perceived quite differently in the two neighbouring countries, and then the debates about nuclear energy and its possible future role, which is a real bone of contention between Poland and Germany.

3 Renewables: Threat or Security Solution?

There is a very deep contrast between the way renewable energy is portrayed in Poland and Germany. The German media discussions of energy issues are quite extensive—it is probably safe to say that they go beyond the usual level of public interest in such technical issues in Europe. In our media analysis of key outlets between 2006 and 2014, we identified 1457 instances in which energy security in the power sector was discussed. A small number of these has included securitising moves or security jargon, and identified threats. The two threats mentioned most often were: climate change/CO_2 emissions (29) and renewable intermittency (29).

These two threats are linked with two distinct sets of referent objects. It is clear that climate change is a threat for both society and the environment. The intermittency of renewables (here meaning wind and solar), on the other hand, is an objective characteristic of that energy source, questioning the reliability of energy supply for the society and economy. Intermittency is of course an issue both as the cause of potential energy shortages (when "the wind does not blow and the sun does not shine"), but also of energy surplus. In June 2014, a hot and sunny summer put significant pressure on European power systems, when some conventional plants (coal and nuclear) had to be taken offline due to high temperatures and lack of water, while at the same time renewables increased their share.

> Electricity grid operators speak of a "special challenge"… due to the holidays the consumption of electricity is likely to fall to the lowest value of the year. At the same time, because of the bright sunshine, the solar systems

> press almost all their power into the grid … No one can speak of blackout risks. But the electricity grid operators are preparing themselves with a series of precautions for the exceptional situation which is now recurring annually. "Such a weather situation is a challenge for the network operators," said a spokeswoman for Tennet. (Wetzel 2014)

Overall, however, renewables are seen as a solution to energy security challenges more than their source. All our interviewees saw them as a means to improve the German energy security significantly and therefore very important. The rationality was the role of renewables in reducing the use of conventional sources and more importantly, the German dependency on imports of fossil fuels. Despite the relatively high investment costs, the fact that they generate no additional fuel costs was pointed out, together with a justification focussing on economic innovation and job creation.

The decentralisation of the energy system was portrayed as an asset, adding to its resilience—and while intermittency is an important issue, our respondents noted that there was no renewable-related blackout so far, and that the system is stable despite increasing renewable penetration. "In the entire history of the *Energiewende*, there was not a single major blackout. The networks work, the necessary balancing also works. … and it doesn't look as if there is now a problem in the near future, but rather that Germany is pushing ahead with innovations."[2]

This is not to say that renewables are presented as unproblematic. A major issue is the lack of sufficient energy storage—and the expansion of flexible pumped-storage hydro plants, for example, in the Alps, creates a set of economic and environmental problems of its own (Frank 2006). Another issue is problems with transmission—including "loop flows" through neighbouring countries' power systems. These issues are signalled both by the interlocutors and numerous newspaper articles (29 discussing grid weakness and 23 mentioning negative impacts on neighbours).

What is important is that renewables and the energy transition towards a renewable-based system is not securitised. The issue is certainly high on the political agenda, and technical arguments meet societal and economic questions. Importantly, costs and energy prices are raised as a problem to

be addressed, with German industrial competitiveness at stake. These issues get more attention than technical vulnerabilities (111 mentions of market-related threats). As a representative of German Trade Union Confederation noted, the electricity prices are high for the German industry, and they "can't grow more, not much more for long." Consequently, it has a negative impact on the competitiveness of the German industry.[3]

The external European environment is presented as an important element of the ongoing energy transition—a means of achieving further energy security and reducing vulnerabilities, rather than a source of threats. The German respondents evaluated the current EU legal framework as "fairly good" or "neither good nor bad," praising the efforts towards policy harmonisation and Europe-wide decarbonisation commitments, but also suggesting that further compromise regarding the promotion of renewable energy between the various interests, which differ in Europe, must be found, so that the German *Energiewende* could become a European *Energiewende*. "The energy transition will only be a success if it is organized Europe-wide"—claimed The Federation of German Industries (BDI) in its statement on planned EU "winter package" (BDI 2016). "With the rapid expansion of renewable energies in Germany, the neighbouring countries are increasingly forced to think about their own energy markets. And the closer the European electricity market grows together, the more they will see that it is expensive to invest in conventional energy sources."[4]

In arguments for expanding the energy transition beyond Germany's borders, ideas resonating both with a vision of a Europe-wide market and energy solidarity built on an understanding of the neighbours' security concerns can be seen:

> [A] European energy supply would benefit the energy security of Germany and the entire EU. The mix of locally produced electricity and increased energy efficiency makes a country more independent of imports and international price shifts. Nowhere can the consequences of energy insecurity be better observed than in Europe: the Ukraine crisis has reminded the Europeans painfully how the EU today covers around a third of its gas needs. If the EU is to tackle energy needs as a step towards a European

> energy community to achieve a better negotiating position with Russia and an integrated energy infrastructure within Europe, it should recognize the crisis as an opportunity and a vision for sustainable energy policy.[5]

The Polish discussions of energy security in relation to renewables are quite different. The media debate is visibly narrower (328 texts overall), and while "climate policy" is also mentioned as the key threat (27 times), it is seen in a very different light. It is not so much climate change and emissions *per se*, rather EU climate policy which constrains Poland's energy choices and puts additional economic pressure on the sector (particularly the coal-fired plants). Consequently, the EU is second on the list of threats (10), presented as the source of damaging and ostensibly misguided legislation:

> One of the most common and most often reproduced mistakes is the equation of sustainable energy with the division between 'dirty' energy sources – most often fossil fuels are mentioned here – and 'clean' – usually those based on wind and sun are pointed out. This dichotomy is absolutely fallacious from the point of view of sustainable energy, but it is used by various lobbies, with the environmentalist lobby at the forefront. The sad consequence is the inscription of this false division into the energy and climate debates taking place on the EU fore as well as in other international organizations. (Mayer 2014)

Much of the discussion focusses on costs and potential economic losses apparently inevitable when a transition from coal to renewables is conducted. The policymakers interviewed were unanimous in their view that at the country's current stage of development, an energy mix based on 80–100% renewables is not possible (though the EU framework proposes that level of RE capacity only in 2050), and pointed out that Poland is meeting its obligations with almost 12% of renewable electricity and good chances of reaching the 15% target in 2020. Renewable technologies are perceived as still very expensive and the Polish society is not ready yet to pay higher bills for electricity.[6]

A core problem from the perspective of the central government and legislators is the need to safeguard and only gradually restructure the large

domestic coal sector. Over 100,000 people are employed in the mining and coal power sector, the former concentrated mostly in Upper Silesia. Miner interest groups and unions are perceived to be an important political power, opting for the status quo or very conservative energy-sector reforms (Sutowski 2015).

While the interviewees agreed that RES can play a positive role in Poland's energy security, there was also a list of important drawbacks and disclaimers listed by the politicians. The role of renewables is to be conditional, among other things, on the generation costs, the technology and whether they are able to fit into the model of the country's economic and business development. Germany was pointed out as an example of disruptive and hasty energy transition which generates not only high costs but also adverse effects. These include market failures and undermining broader energy security as large-scale baseload generation and utilities would be losing their market shares and profits. Arguments were also heard that some renewable energy technologies are not environmentally friendly. They can have negative effects, when it comes to ultrasounds and "they can kill birds."[7] Apart from this, the Polish power network has not been upgraded due to lack of investment and is not able to transmit the additional volume of power generated from renewables on a large scale.

The problem of intermittency, which is also raised in the Polish context, is countered by RES supporters with data and examples of other systems. Also the argument about grid weakness is turned on its head, turning renewables into an impulse for modernisation. "In my view the impact [or RES] can only be positive … They increase the number of sources in the system, forcing its expansion, reconstruction of old grids, construction of new nodal points. Renewable energy requires a change and revolution in the perception of the entire system."[8]

It comes as no surprise that a majority of the respondents see EU renewable energy regulation as "neither good nor bad" or "poor." Although the EU grants its Member States considerable freedom in deciding how to fulfil their obligations, the interviewees expressed the wish that the EU developed strategies that match the strategic interests of the Member States better. It has also been pointed out that EU legislation

does not divide renewable sources into stable and unstable or more or less ecologically harmful.

Perhaps the most important argument, however, merges economic, legal and foreign policy arguments with elements of security jargon. The issue of "forced internationalisation" relates to cross-border electricity trade as well as renewable energy investment. Expansion of new renewable energy source, especially wind and solar PV, is portrayed as a new form of energy dependence, this time on technology, knowhow and materials (e.g. rare earth minerals).

> A negative vision is dominating in the public debate. RES are associated with high costs, uncertainty regarding stability, the lack of adequate expertise and the lack of technology, concerns regarding the entry of foreign companies in the Polish market. And so – generally disadvantages. The media and politicians emphasize the negative impacts. I don't see anything positive.[9]

It is argued that EU renewable policy, pushing for rapid RES expansion, is playing into the interests of certain states (i.e. Germany, Denmark, Spain) at the cost of those that have not developed domestic production sectors, and that the whole of Europe is becoming increasingly dependent on mineral imports from China and South East-Asia (Kwiatkowska-Drożdż 2011).

But these national security arguments against increased renewable deployment are not the only ones which display traces of securitisation. Interestingly, supporters of renewable energy have been using the language of energy security—including securitising moves mimicking those used by mainstream politicians in debates around natural gas (see Heinrich (Chap. 3) in this volume). "The 'energy union' which Poland proposed will be a step in the right direction, if it does not limit itself to the promotion of coal and nuclear. Only renewable energy will guarantee resilience against another event of energy blackmail on the part of Russia"—claimed the director of Greenpeace Poland, Maciej Muskat (Majszyk 2014). In an open letter to the then parliamentary opposition chairman Jaroslaw Kaczynski, under the headline "RES saving from Russia," the leaders of Poland's Greens Adam Ostolski and Olga

Mielnikiewicz noted that by 2030 "renewables … could supply even up to 45% of Poland's primary energy needs. In that scenario there would still be place for Polish coal, but would squeeze the space for coal and gas imports from Russia" (2014).

These very strategic securitisation attempts, casting the Polish society as the referent object, threatened by Russia, propose renewables as extraordinary measures—disrupting the energy sector's status quo and necessitating deep and broad reform, but promising to provide security. Concrete examples of that are already given:

> In 2008 we had a so-called blackout in Western Pomerania. There were power shortages lasting even 6–7 days. Thanks to the fact that there were two large wind farms on the island of Wolin, the port in Świnoujście could resume operation. Despite the limited capacity, having it located in strategically important places, we can already see the positive effect on national energy security.[10]

It is visible that the environmentalists and RES supporters are borrowing the well-recognised setup with Russian existential threat for Poland—an idea established and developed by conservative politicians and gaining prominence after 2006 (Szulecki 2016). What varies is the specific delimitation of the referent object—which in conservative securitising speech acts is usually the *state* ("a political subject behaving in a sovereign fashion," see: Naimski 2015: 170), *the energy system* (understood mostly as an institutional and economic network of incumbents) or more pompously *the nation*. In environmentalist arguments, it is the *society* and *energy consumers* (and prosumers) who are to be protected. This shift allows for a different set of (extra-ordinary) means to be proposed, and backed with evidence on systemic vulnerabilities and the options for increasing resilience.

Despite their willingness and ability to talk national security, the pro-renewable environmentalists can also become the object of securitisation, cast as a threat or at least an instrument in the hands of foreign power. Since the environmentalist agenda is rarely limited to renewables, "greens" suffer from collateral damage from other issues, such as anti-nuclear or anti-shale protests. A prominent politician and former MEP, Paweł Piskorski, spoke openly of a "Russian-environmentalist anti-shale alli-

ance" (Piskorski 2014). On the other hand, in the renewable sector there are strong implications of working "in the interest of the German state," particularly focused on Polish branches of German foundations, like the Green Heinrich Böll Foundation.

> [We] have always followed the activity of German political foundations with interest. An example is the recent activation of the Böll Foundation, linked to the Greens, on the *Energiewende* … The Böll Foundation existed in Poland before, but hardly anyone knew about it. It started to become visible on that occasion … And there we have a vast number of conferences, meetings, panels in our country, we have help for our domestic Greens – in what form, we do not analyse that in detail. [We have] newspaper articles and meetings with the inhabitants of Pomerania, where the Polish nuclear power plant is set to be built. [At one meeting] I expressed my surprise at the fact that I was supposed to express the internal Polish point of view in the presence of representatives of German foundations. I respect their work, but you cannot expect to discuss the strategy of the Polish state with employees of German institutions present … Some Polish participants were not able to understand that employees of German foundations work for the German state … and we should first discuss things among ourselves.[11]

This line of thinking is a good illustration of a mechanism which Guzzini calls a "vicious circle of essentialisation" (2013: 5 and 251). In the context of a particular security imaginary, all foreign policy interaction begins to be interpreted in a certain light, in which roles are pre-defined by the expectations derived from geopolitically essentialised imaginary. This mechanisms can act together and towards securitisation, even if no specific security speech act is detectable (compare the discussion in Chap. 6).

The same mechanism is visible in relations with Russia, and also underlines an important difference in energy security perceptions between Germany and Poland. As one Polish energy expert put it: "where the Germans don't see any problems, we see only problems."[12] This mechanism corresponds with a more statist stance on energy policy, as contrasted with a more market-focused approach (see Szulecki and Westphal (Chap. 7) in this volume). We found that thinking in statist terms was at times combined with expressions of acceptability for securitising moves.

"Energy security," one civil servant claimed, "means securing enough energy to provide for the functioning of the economy, the society and state institutions." Importantly, however, being positioned in a clearly market-focussed setting does not mean that acceptability for securitisation and self-fulfilling geopolitics does not occur. "We are in the middle of hard negotiations with the German side and this is about national security"—said the director of the Warsaw Energy Exchange, refusing to give a scheduled interview to one of the authors due to the latter's affiliation with a German university.

On the other hand, very strong attempts at de-securitisation can also come from the neighbouring state administrative institution. This is something visible in a separate issue area emerging in relation to renewable energy expansion is the problem of uncontrolled transfers of electricity—so-called loop flows. Though Polish journalists and experts often accuse the German side of not paying adequate attention to the problem, the debate on interconnectors and transmission grids is in fact much more prominent in the German than in the Polish media. Of the 1457 German media articles referring to the electricity system which were analysed in our project, 81 mentioned different kind of technical threats to the system, mostly inadequate grid, possibility of blackouts and problems inflicted on neighbouring systems. Much of this is blamed on the "unmanageable" renewables (at least by the conservative media) (e.g. Drieschner 2013).

The solution most often given is the simple "negative" one—separate the two energy systems. Since it is impossible to cut the connection, phase shifters were installed on the two German-Polish links, under pressure from the Polish transmission system operator. That kind of negative solution seems to be favoured by politicians far away from the technical complexity of the power system. The closer we move to actual technical expertise, the more de-securitised the discourse and the more "positive" solutions are preferred. "Positive" solutions would include expanding transmission infrastructure on both sides of the border and adding new interconnectors. "In an ideal market model, interconnectors serve two functions—stabilizing national energy systems in case of a technical failure, and optimizing the use of energy from different sources and directions"—explained an expert from the Polish Foreign Ministry.[13]

"Electricity grids are a complex organism, you have to make sure that it is stable … the larger the network the larger the risk of a system-wide failure, but then again, it allows for greater flexibility. Interconnectors increase grid stability"—pointed out a German diplomat.[14] The discussions with engineers employed in institutions like the national energy regulators, transmission system operators of energy and economy ministries moves the discourse beyond de-securitisation, into fully depoliticised realm. "We would not call it threats. Perhaps—challenges"—said a representative of the Polish regulator—"on the level of regulators our meetings [with the German counterparts] have a purely technical and legal character, executive. We do not take part in political discussions."[15] The representatives of the North-East German transmission system operator, 50Hertz, echoed that desecuritised, technical attitude:

> Loop flows cannot be avoided in such a meshed electricity network, which we have here in Central and Eastern Europe … This is why it is important to be able to control these loop flows as much as possible. And we are currently working with our colleagues in Poland to ensure that we are in a better position to manage these flows without compromising energy security or grid safety … We have started to discuss with the Poles in 2012 how to deal with it and have decided that we must be able to control the flow of electricity as quickly as possible … We are currently considering how best to deal with this issue in order to create safe operation and, on the other hand, to allow the export of electricity to Poland.[16]

Expansion of interconnectors is, however, difficult for economic and political reasons, as increased trade would push out the more expensive sources from the market (cf. Puka and Szulecki 2014a). These used to be German, but in recent years wholesale energy prices in Poland were consistently higher than those to the west of the Oder.

4 Nuclear Energy: Risk Factor or Stabiliser?

Energy security debates in the nuclear sector conflate discussions of two separate issues—*safety* and *security*. In both Polish and German languages, the two are expressed by a single word (*bezpieczeństwo* and *Sicherheit*,

respectively). This linguistic note is important insofar as the different challenges and governance areas of (reactor) safety and (national energy) security can easily blend into one, when expressed in the same, unifying concept. That is why the question of threats in the context of nuclear energy can turn out to be somewhat problematic.

Poland and Germany's domestic discussions are again quite far apart. Gradual nuclear phase-out in Germany was on the table since the 1980s, and the decision to phase out all nuclear by 2020–2022 was taken already in 2002 by the Red-Green coalition government. It was then watered down by the conservative Merkel government, but in 2011, in the aftermath of the Fukushima Daiichi accident, the earlier decision to "step-out of nuclear" (*Atomausstieg*) was re-confirmed (Cherp et al. 2017). In Poland, plans of building a nuclear power plant took concrete shape in the late 1970s, and in the 1980s construction began at Żarnowiec near Gdańsk, but was halted in 1990 and a moratorium on nuclear energy was introduced after years of grassroots societal protest on-site and across the country (Szulecki et al. 2015). The idea of building an NPP returned after 2005 and after 2009 the Polish Nuclear Program was launched, aimed at constructing two reactors by the mid-2020s, possibly again near Żarnowiec.

In consequence, national debates on nuclear energy security have very different departure points. In Germany, concerns over reactor safety mix with doubts whether nuclear phase-out can be conducted without having an impact on wider national energy security and whether the environmental security and climate mitigation efforts will not be compromised by a move to hard coal and lignite baseload generation. In Poland, reactor safety and nuclear waste are both hypothetical issues, whereas the rationality of constructing the first nuclear power plant is positioned between energy independence, modernisation, and economic viability.

"Energy security is the key element of national economic security"—Donald Tusk claimed in his inaugural exposé as Poland's Prime Minister in 2007. Soon the nuclear project was framed as a strategic investment and a crucial solution to the country's energy security problems. This was confirmed by Poland's Energy Strategy 2030, a roadmap document prepared by Tusk's government in 2009, where "Diversifying the structure of energy production by introducing nuclear energy" constituted one of the chapters.

Importantly, the referent object of all rhetorical action (not just security speech acts) in the pro-nuclear discourse was not so much the society, nation or state but *modernity*, or Polish identity as a modern state. This idea drew on a popular twentieth-century notion that nuclear energy is the highest achievement of the techno-industrial society, and thus a sign of progress and keeping up with the modern world (see the notion of "atomic hype" in the German context, Morris and Jungjohann 2016: 302–7). With a new referent object came new threats. In a risk/safety-oriented anti-nuclear discourse, threats are numerous and come from different domains. In the governmental pro-nuclear discourse, the core threat is the people—either anti-nuclear organisations or the sceptical society. Of the 221 coded newspaper articles, this is mentioned 20 times, much more often than any other threat. Internationally, the potential threat is, again, Germany—due to its recognised anti-nuclear consensus and the *Atomausstieg* decision. Indeed, German citizens sent thousands of letters protesting Poland's nuclear plans, and the federal government consistently demanded transnational consultations, citing the Aarhus Convention as the legal justification. "We took this as something of an interference in our internal affairs"—a civil servant from the Polish Ministry of the Economy said.[17]

It must be noted, however, that German societal and political weariness towards neighbouring countries' nuclear projects is surely not limited to Poland. In 2016 alone concerns were expressed regarding Britain's small-nuclear reactors, and the possibility of an economic race to the bottom in security standards in these "atomic dwarves" (Seidler and Schultz 2016); the Belgian Tihange 2 NPP near German borders (Spiegel Online 2016b); and the French Fessenheim plant, in the case of which it was the Minister president of Rhineland-Palatinate sending an open letter to the French President Hollande asking for the plant to be shut down (Spiegel Online 2016a).

In the Polish media, nuclear energy is also presented as an answer to the country's energy dependence problems—often in relation to Russia (though gas and nuclear are not necessarily substitutes in the Polish energy mix). The fact that nuclear fuel would also have to be imported is of lesser importance, since "in case of uranium we have many import directions, and among these ones that are secure, from countries which

are fellow members of the same defensive and economic alliances … there is a certain atmosphere in the society, linked to the perception of the foreign policy situation around our eastern borders, seeing a threat from that side. This explains the rising support for nuclear energy."[18]

The two key problems mentioned in the media discussions are low societal acceptance of nuclear energy (20 quotes) and mounting investment costs (25). The Polish government initiated a wide media campaign which was meant to persuade the relevant societal groups (local communities and parts of the undecided populace) to support the project and accept the national security and modernisation rationality (Stankiewicz 2013). It is therefore a rather peculiar situation, in which securitisation occurs around the nuclear project, where the future nuclear plant is the referent object to be protected, while societal actors—local communities, environmental NGOs or the general uninformed public—become the threats. On the other hand, external threats, such as terrorism, are dismissed by nuclear energy experts as exaggerated.

Achieving the goal—constructing Poland's first nuclear power plant—requires a number of measures going beyond the usual practice of liberal democratic politics. In 2012, Tusk nominated his long-term colleague, Aleksander Grad, for the post of director in PGE's daughter companies PGE Nuclear Energy and PGE Nuclear Plant 1. Moving an active politician to a (partly) private business company created a peculiar personal public-private union, and the PM justified it by saying that the "state's engagement and strict political oversight on nuclear energy development is absolutely necessary" (Tusk 2012). To the growing concerns about the project's economic viability, the Prime Minister replied: "building security has to come at a cost and the role of the state is to design market regulation that will minimize economic risks" (Forbes 2013).

But more far-reaching exceptional measures were to be taken against the project's potential political opponents. In a strategic document about the project public communication and PR,[19] the relevant audiences were divided into "friends" and "enemies," an example of explicit Schmittean securitised language. A dialogue with "the enemies" is impossible, states the report, since they have "contradictory interests and goals." The only actions that can be taken are "communicative security" for governmental information campaigns and the "complete elimination" of "enemy" com-

muniques. The recipe for public debate presented in the document is that "absolutely crucial is to take actions that will eliminate or tame the influence of enemies on the communicative sphere and will use our friends for information support and pushing through the positions that we want to see" (p. 20). Particularly dangerous "enemies" include environmental organisations, as well as scientists and journalists sceptical towards the nuclear project, but having expert authority and good media contacts. Open debates are to be avoided, because they can "give platform to ardent nuclear-sceptics" (p. 64).

If this was not enough, the government also reformed the Nuclear Law in 2012, giving new powers to the Agency of Internal Security, which include the possibility of monitoring (e.g. spying on) potential opponents of the nuclear project, to "protect" it (Czarkowski 2012). If the director of the Agency interprets an individual's or organisation's actions as a potential threat to the project, defined as a "crisis situation" which may have terrorist consequences, such measures are justified—calling into question the possibility of any organised protest against the nuclear plant's construction.

Societal mobilisation was indeed considerable, and a "social referendum," held in 2012 at Mielno, one of the localities earmarked for the construction of a power plant, saw 94% vote against the plant (with a 57% turnout). This result, the experience of earlier nuclear hopes and the general feeling of unpredictability of social moods leads to the notion that "societal participation should not be mythologized."[20]

As a representative of the then Dept. of Nuclear Energy in the Economy Ministry claimed: "a country on the economic rise, especially one like Poland, cannot afford a relatively expensive investment only because of whims. There are really serious reasons behind it. One of these reasons is our conception of energy security, the need to diversify [sources], as well as the structure of energy production in the power system."[21] The project's rationality and the adequacy of governmental involvement is, however, questioned—"One sometimes wonders whether this program is really thought through by the government," as a lawyer working on nuclear legislation noted (Łakoma 2011). Project delays and economic security from societal and national perspectives are cited as important concerns. "The most fundamental risk is political. The risk of stopping

the nuclear project at a very advanced stage, the way we've seen it in Żarnowiec [in 1990], where large sums of money was spent and the local population was left disappointed."[22]

In Germany, the nuclear discussion is much more politicised—and this is reflected in the scale and heat of the media debate (our analysis featured 1230 articles). In media discussions of energy security in relation to the nuclear sector, the main challenge with which the Germany's energy policy has to cope with is also import dependence (which is actually higher than Poland's—mentioned 44 times) but also, importantly, climate change (41 references). Nuclear energy in this framing becomes part of the problem, not a solution—introducing security issues of its own, linked to reactor safety (50 mentions) and nuclear waste management (19). Nuclear phase-out in turn raises concerns about costs (27), potentially rising electricity prices (22), and renewable energy sources volatility (14), compromising the energy system stability (6).

While Germany (East and West) began its nuclear energy adventure during the European "atomic hype" years, it also quickly developed a strong domestic opposition movement (Morris and Jungjohann 2016: 303–5). It had dual roots—one was environmental and emphasised the risks of accidents and problems with used nuclear fuel storage. The other—coming from the peace movement—argued that nuclear energy is inherently connected with nuclear weapons. According to that line of thinking, "nuclear physicists needed to believe in the blessings of peaceful atoms to protect their elite status, let the world see them as henchmen of death" (Radkau and Hahn quoted in Morris and Jungjohann 2016: 303).

The Three Mile Island accident in 1979, the Chernobyl catastrophe in 1986 and finally the incident at Fukushima Daiichi all had impacts on the public perception of nuclear and gradually undermined the future of this sector in Germany. Already in 1974 societal protests against new plants and the occupation of building sites turned violent, with the protesters portrayed as "anarchists and leftist extremists" by the authorities. The campaigns, however, proved successful, and the Green Party which emerged as the institutionalised political force building on earlier dispersed environmental and peace dissent, made it to the Bundestag, bringing nuclear phase-out onto the political agenda for good.

The decision taken in 2011 to shut down all nuclear, reversing earlier policy of the Merkel government which planned to water down the phase-out, came as something of a shock for the established players on the energy market. This rapid energy transition, dubbed *Blitzwende*, was discussed in terms of risks if not threats to national energy security. A journalist claimed that "behind closed doors, power sector experts were not talking about whether a blackout would happen, but when – on a hot day in June, or when power consumption peaks in the winter?" (Matthias Inken in Morris and Jungjohann 2016: 342).

> In a world that is increasingly dependent on energy, the threat of blackouts is a serious one – a horror scenario. If you can blame your opponent for it, it is a convenient, powerful weapon in the controversy about electricity. Those who opt for the wrong form of energy, the opponents shout, will be threatened by total blackouts. (Kemfert 2013: 68)

It soon turned out that what Germany had to cope with was energy oversupply, not shortage. Power exports rose year by year since 2011, reaching record levels already in 2013 (Fraunhofer 2016).

The notion of nuclear risk and a deeply engraved scepticism is certainly widespread in Germany. In 2016, the mayor of Aachen was lauded by the city's inhabitants when he claimed that "when safety (*Sicherheit*) is at stake, there can be no taboos" and the town's stock of iodine and radiation-protective equipment was upgraded (Dohmen 2016). Similarly to the German shale debate, which Chap. 4 has extensively discussed, nuclear is deeply riskified, with worst-case-scenario risk assessment models as base for policy decisions on the future of nuclear:

> [Some] researchers are convinced that the secrecy and lack of transparency [*Geheimniskrämerei*] in the nuclear industry and the supervisory authorities lead to an excessive reliance on the safety of nuclear power plants because there is no overview of what goes wrong. This perception influences not least political decisions. Wheatley comes to a completely different conclusion: "The risk level of the nuclear energy according to our analysis is extremely high" … In order to be able to estimate the size of the explosion risk in nuclear power stations, experts need data. But there is not enough of it. In addition, experts are arguing about the method of risk

> analysis … At least at the Cologne Society for Plant and Reactor Safety (GRS) the probabilistic safety analysis is seen critically. After the worst-case scenario nuclear accident [*super-GAU*] in Fukushima, GRS researchers had looked at what had actually gone wrong with the PSA [Probabilistic Safety Assessment] for Fukushima. In their study of 2015, they conclude that "the existing PSAs for nuclear power plants do not take into account rare events and their interaction." (Schäfer 2016)

But the discussion does not end with probabilistic scenarios. The German media and the public are following closely all stories about nuclear reactor safety and various incidents. Such stories focus on actual "human factor" risks and security breaches—a virus which infected the software at a Bavarian NPP, even though it is offline (brought on a USB-stick) (Spiegel Online 2016d) and fake safety tests conducted at Philippsburg NPP in Baden (Spiegel Online 2016c). In this way, the opposition to nuclear is created and sustained though a combination of probability-based riskification and tangible examples of concrete, numerous and often occurring incidents where usually human sloppiness and laziness is the risk factor. This stands in stark contrast with the way the Polish authorities try to steer the nuclear discussion (again, similarly to the one on shale gas) by pointing out the ideal levels of reactor safety, reinforced with arguments of national energy security.

The two national perspectives—or at least the mean positions that can be derived from the wider debates—are difficult to reconcile. In Germany, anti-nuclear sentiments are strong and the political consensus over either gradual or rapid phase-out is very wide. Although Germany and Poland could be strong partners in Europe, Polish plans for the construction of a nuclear plant are a "red cape" for many in Germany,[23] finding little understanding among most politicians and experts there. Combined with the reputation as a veto player in negotiations on climate policy at the European level, cooperation turns out to be much more difficult in practice.

> As a German, one has no understanding for Poland's nuclear power plans. And as far as electric power projects are concerned, the discussion is becoming locked-in, so phase shifters, in order to prevent loop-flows, and so on. I feel that is counterproductive, not worth supporting, I see little constructive cooperation.[24]

Lack of understanding works both ways. What in Germany is perceived as a rational move to reduce unnecessary risks and remodel the energy system and the economy seems anything but rational from a Polish perspective. "I think in Poland we have a society which is reasonably rational, while what we see in Germany is, to me, an aberration in logics. There is no place for discussion, and in a democratic state there should always be place for a discussion. There having opposite views is equated with backwardness"—claimed a Polish ministerial energy expert who in 2013 took part in a German-Polish discussion on nuclear energy policy in Berlin.

5 Conclusions

In this chapter, we looked at extensive empirical data on how energy security is discussed in Germany and Poland within the electricity sector. The main points are summarised in Table 5.1. In Poland, discussions around renewables not only focus on pro-security arguments and systemic risks—as is the case in Germany—but also contain a national security thread related to notions of energy autarchy as well as economic sovereignty undermined by imported technologies and materials. While our interview respondents acknowledged the benefits of renewables for national energy security, counter-arguments (economic, environmental, governance related, or based on the security and stability of the current energy system and grid) visibly outbalanced these merely potential benefits. Importantly, renewables were framed as a threat for the electricity system, and the transmission system operator as well as some technical energy experts, were instrumental in this kind of riskification.

Table 5.1. illustrates the relationship between "objective" challenges emerging from the systemic context of the power sector (corresponding to the way Cherp and Jewell (2014) conceptualise a system's vulnerabilities—as a function of the exposure to risks and the level of resilience) and contrasted with what is actually discussed as a "threat" or "challenge" in the public and policy debates. The German debate, less securitised, seems to be closer to the "objective" systemic vulnerabilities, whereas in Poland the major vulnerability—weak and inadequate grid—remains a non-issue.

Table 5.1 Comparing objective systemic context, threats discussed and referent objects across the two cases and sub-sectors (own elaboration, with input from Aleh Cherp)

Sub-sector	Country	Systemic context	Main threats discussed	Referent objects
Renewables	Germany	Rapidly expanding system based on domestic manufacturing, technological leadership and distributed ownership and backed by numerous and strong interconnections to European markets	Climate change, variability, costs, grid adequacy	Consumers, economy, environment, power system
	Poland	Smaller system based on foreign technologies, weaker and decapitalised grid and few international interconnectors	Variability, foreign technology, costs, competition with conventional energy	Coal-based system, state, economy (competiveness)
Nuclear	Germany	Accelerated phase-out of ageing nuclear power plants in a diverse system with readily available substitutes in form of coal and renewables	Nuclear safety, lack of flexibility, blackouts due to removed baseload capacity	Society, power system
	Poland	Prospects of constructing new power plants in a low-diversity system relying excessively on domestic coal, historical experience with a failed nuclear project in 1990	Lack of societal acceptance, possibility of project failure	Power system, state

A very interesting instrumental use of securitisation and security jargon is visible among pro-renewable environmental activist in both countries. Polish NGOs and "green-minded" experts mimic the securitising moves known from the gas sector to portray renewables as a solution—albeit an "extra-ordinary measure" from the point of view of the incumbents and the worn-out grid—to the country's national security problems. Importantly, these are not problems understood as systemic vulnerabilities, but rather the perceived threats (most significantly—the dependence on Russian natural gas imports). German NGOs, though they do not have to use such arguments "at home," can also use security jargon to justify a Europe-wide energy transition towards renewables. We have also discussed how societal actors engaging in national debates as parts of transnational networks can be an object of securitisation, framed as a threat for national security.

Debates around nuclear resemble those around shale gas, where German riskification of nuclear reactor operation is met in Poland with arguments about energy independence and national security. The German discussions of nuclear are deeply riskified and probabilistic scientific arguments are blended with real-life examples of the unpredictability of the "human factor" in causing potentially serious nuclear accidents. Unlike in shale, Polish nuclear visions generate much stronger domestic opposition and securitising attempts are weaker. In the nuclear sector, we have seen the strongest example of a successful and full securitising move, with the announcement of the nuclear project as a national security issue, followed by proposed and implemented extra-ordinary measures, relating to political practice (blurring politics and business competences), legislation, and special competences given to the security services.

Our analysis has also shown that, especially in the Polish case, politicians are more prone to use and accept security jargon, while technical experts in energy are most active in de-securitisation, even of such serious and problematic issues as "loop-flows." The more international the energy issue, the more likely it is to see spill-overs from foreign policy and securitising moves drawing on a broader "security imaginary"—also a factor of what we have, following Guzzini, called a "vicious circle of essentialisation."

Political decisions following securitisation moves (and so, extra-ordinary measures) can embed securitised logics into the operational

practices of the energy sector. For instance, following an increased proliferation of security jargon in the energy security debate linked to natural gas, the Polish government since 2016 has managed to change the statutes of the four major (and partly state-owned) energy companies, introducing a point saying that they constitute an "instrument of national energy security." This change implied that they would no longer be subjected to economic, market-logic but might be forced to follow decisions made according to the "national energy security" interest, left undefined. That securitising move led to changes in the statutes of three of the four companies, but when the issue became more public and de-securitising counter-moves mounted, the move was not accepted by the board of the last company, Tauron (BiznesAlert 2017).

With nuclear energy removed from the agenda (or at least given a lower priority) by the new Polish government in 2015, the main bone of contention between the neighbouring countries was, seemingly, removed (though the nuclear option was put back on the table in mid-2017). What remains a shared problem from the perspective of energy transition and environmental security (relating especially to air quality, but also water resources and climate change) is the role of coal, particularly lignite, in the energy mixes of both Poland and Germany. In many ways, the perception of coal as a means of stabilising the system and assuring national energy security is shared, and what differs is the mid- or longer-term perspective in which that is to be maintained:

> We are building a completely new electricity market, which makes the *Energiewende* irreversible. It is probably the most important decision of this legislative period in energy policy. But renewable energy is also a challenge to security of supply because of its dependence on the weather. We therefore also need a reserve at conventional power plants to ensure that there is never a supply shortage. In the transition period, in which we want to gain experience, we use brown coal power plants, which are available for this reserve. They would then be shut down.[25]

This is a problem that does not seem to go away—and if divergent energy security perceptions moved closer and became more holistic in both Berlin and Warsaw, some needed cooperation in that area would be possible (Gawlikowska-Fyk et al. 2017).

Notes

1. Henceforth we use "electricity" or "power" as synonyms.
2. Interview with an energy expert, GermanWatch, conducted by Bartosz Gruszka, Berlin, 29 May 2015.
3. Interview with a representative of the German Trade Union Confederation, conducted by Julia Kusznir, Berlin, 27 May 2015.
4. Interview with an energy expert at WWF, conducted by Julia Kusznir, Berlin, 28 May 201.
5. Rebecca Bertram, the Heinrich Böll Foundation's expert on ‚European Energiewende, "Warum Deutschland eine europäische Energiewende braucht,"https://www.boell.de/de/2017/02/20/warum-deutschland-eine-europaeische-energiewende-braucht
6. Interview with an energy expert at BiznesAlert, conducted by Julia Kusznir, Warsaw, 15 May 2015.
7. Interview with a former Member of the European Parliament, conducted by Julia Kusznir, Warsaw, 14 May 2015.
8. Interview with the president of the Polish Wind Energy Association, conducted by Karol Dobosz, Warsaw, 20 May 2015.
9. Interview with an energy utilities employee, conducted by Julia Kusznir, Warsaw, 11 May 2015.
10. Interview with the president of the Polish Wind Energy Association, conducted by Karol Dobosz, Warsaw, 20 May 2015.
11. Interview with Anna Kwiatkowska-Drożdż, leader of the Germany and Northern Europe Team at the Center for Eastern Studies (OSW), a think-tank supervised by the Chancellery of the Prime Minister. Interview conducted by Łukasz Warzecha, "Dusza rosyjska i niemiecka," *Rzeczpospolita*, 12 February 2016.
12. Interview with an energy expert at BiznesAlert, Warsaw, conducted by Julia Kusznir, 13 May 2015.
13. Interview with the representatives of the European and Regional Energy Policy Office and the EU Economy Department at the Polish Foreign Ministry, conducted by Karol Dobosz, Warsaw, 10 July 2015.
14. Interview with an expert on economic affairs, Embassy of the Federal Republic of Germany, conducted by Karol Dobosz, Warsaw, 7 July 2015.
15. Interview with two experts, Energy Regulation Bureau, conducted by Karol Dobosz, Warsaw, 8 July 2015.

16. Interview with two employees of 50Hertz, by Julia Kusznir, Berlin, 27 January 2016.
17. Interview with two Energy Department experts, conducted by Karol Dobosz, Warsaw, 3 July 2015.
18. Ibidem.
19. Biuletyn Informacji Publicznej Ministerstwa Gospodarki, 2009, *Koncepcja kampanii informacyjnej dotyczącej energetyki jądrowej: Bezpieczeństwo, które się opłaca*.
20. Interview with two Energy Department experts, conducted by Karol Dobosz, Warsaw, 3 July 2015.
21. Ibidem.
22. Ibidem.
23. Interview with an energy expert, GermanWatch, conducted by Bartosz Gruszka, Berlin, 29 May 2015.
24. Interview with an energy expert at the Renewable Energy Agency (Agentur für erneuerbare Energien), conducted by Bartosz Gruszka, Berlin, 26 May 2015.
25. Sigmar Gabriel, Federal Minister for Economic Affairs and Energy, interview in Westdeutschen Allgemeinen Zeitung, "Wir schaffen die Energiewende" 3 September 2015.

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6

Energy Securitisation: Avenues for Future Research

Andrew Judge, Tomas Maltby, and Kacper Szulecki

1 Introduction

What are the implications of linking "energy" and "security"? The preceding chapters have all sought to examine the interaction between these two seemingly distinctive realms. They have done so in a variety of productive ways that demonstrate both the potential of utilising securitisation theory for analysing what happens when energy is constructed as a security issue and the limitations of the canonical Copenhagen School framework when it is applied to energy issues. One of the key insights, originally

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argued in Chap. 2 and developed empirically in Chaps. 3, 4 and 5, is that the use of the term "energy security" is not synonymous with "energy securitisation", at least in how the latter term is conventionally understood. This suggests that if the promise of energy securitisation research is to be fulfilled, it is necessary to have a clearer sense of where further research in this area should focus.

This chapter suggests areas where researchers interested in the social construction of energy as a security issue may want to focus their attention. It does so through both an examination of what Securitisation Studies could learn from the study of energy issues (not least the chapters in this volume) and what insights could be drawn from theoretical developments within Securitisation Studies for the study of energy security. This chapter is structured into three sections. The first provides a brief overview of the strengths and weaknesses of the Copenhagen School framework when it is applied to energy issues, drawing on some of the key insights from the preceding chapters and critiques from across the broader field of Securitisation Studies. The second section outlines two possible avenues for future research that focus on the discursive construction of energy security—an examination of whether energy is a distinct "sector" of security and whether there are alternative logics of security that depart from the Copenhagen School understanding of securitisation. The third and final section adopts a different approach, focusing on the process of securitisation and outlining some of the insights that can be drawn from so-called "sociological" understandings of securitisation.

2 Energy Security and the Copenhagen School: Strengths and Limitations

As demonstrated in Chaps. 3, 4 and 5, the Copenhagen School framework has some important strengths. It has proven to be particularly useful in situations in which actors connect aspects of energy policy to issues of national (military) security. This stems primarily from the central idea of the Copenhagen School—that the concept of security "means" something distinctive which can be examined in a variety of situations:

> The answer to what makes something an international security issue can be found in the traditional military-political understanding of security. In this context, security is about survival. It is when an issue is presented as posing an existential threat to a designated referent object […] The special nature of security threats justifies the use of extra-ordinary measures to handle them. (Buzan et al. 1998: 21)

This is, in short, a classic Realist understanding of security based on a traditional conception of national (military) security. While the Copenhagen School is clear that the "essential quality of existence will vary greatly across different sectors and levels of analysis [and] therefore, so will the nature of existential threats", it nonetheless considers security to have a distinct meaning (Buzan et al. 1998: 21–22). This definitional clarity has a clear methodological advantage—it provides analysts with an explicit standard to compare the discourse of potential securitising actors against (Williams 2011).

Based on this definition, energy researchers have a powerful tool for distinguishing "energy security" as a relatively neutral policy goal, from "energy security" as a rally-around-the-flag performative, meant to mobilise an audience and transcend regular political practice. This distinction between the word "security" and what the Copenhagen School refers to as the "grammar" or "logic" of security is clear in the analogy drawn by Poland's defence minister Radosław Sikorski between the Nord Stream pipeline deal and the Hitler-Stalin pact (see chapters by both Heinrich (Chap. 3) and Siddi (Chap. 10) in this volume).

It is also important to recognise that the Copenhagen School, with its roots in the experience of the Cold War peace movement, combines this methodological tool with a normative vantage point in its assertion that transforming something into a security issue has the political consequence of removing an issue from normal democratic politics (Buzan et al. 1998: 29). It therefore constitutes a powerful tool for critical energy security studies. If we consider that "extra-ordinary measures" and "exceptional politics" tend to mean the removal of energy issues from public oversight, a number of critical questions come to mind. Who does, and who should, exercise power in governing the energy sector? To what extent is securitisation and expert insulation of energy security

democratically acceptable? Moreover, *cui bono*? And what is there to be gained by making something—a gas pipeline, for example—a security issue to be addressed by extra-ordinary measures (Karyotis and Skleparis 2013)?

Emphasising the national/military logic of security and examining these fundamentally political concerns have a further benefit—as a useful means of integrating energy into Security Studies. As argued in various chapters in this volume, energy security has proven challenging for many International Relations and Security Studies researchers to grasp and understand. One of the clear advantages of the Copenhagen School framework is that it offers a way for these fields to engage with energy issues in a more nuanced way than the traditional "strategic resources" and "oil wars" literatures. This is important because these literatures have very little to say about the relative importance of different vital energy systems, and are incapable of understanding the construction of security vulnerabilities in ways other than those articulated by policymakers. Instead, the Copenhagen School framework offers a means of problematising individual energy policy decisions and, indeed, denaturalising whole energy policy paradigms. This is something which is developed in the second part of this volume, particularly by Szulecki and Westphal (Chap. 7), Kustova (Chap. 8) and Landry (Chap. 11), where the authors draw on securitisation and other Critical Security Studies' concepts to look beyond the established "facts" of energy policy and taken for granted assumptions about the factors that shape energy security.

There are, however, important limitations to the Copenhagen School that must be acknowledged. Even if we can praise the methodological clarity and critical edge that the framework brings to energy issues, the model can be very rigid and constraining. The fact that the authors of the preceding chapters had to adjust the framework, loosening it in some places and operationalising it more strictly elsewhere, shows just how constraining this approach can be when applied to energy issues. Similar problems have been found when the framework has been utilised in other non-traditional areas of security. There are three questions in particular which help to demonstrate this core limitation.

First, what counts as a securitising move? Does this have to be an explicit security utterance? Does the threat need to be existential and

undermining the physical survival of a referent object? Such ambiguities are clear in the above example of Sikorski's speech about the Nord Stream pipeline. In that particular speech, it is notable that the word "security" is not used, nor is there a direct claim about the Nord Stream pipeline deal constituting an "existential threat" to Poland's survival. Yet the link between energy and national/military security is clear. Moreover, there are numerous other examples from the same time period where Polish government officials claimed that energy was a "weapon" that constituted a "threat" to national security (Judge and Maltby 2017: 195–197). Is this a case of concept stretching, or does any utterance of security have the potential to securitise an issue, regardless of whether or not it follows the Copenhagen School's logic of security (Huysmans 2002)?

Second, does securitisation only occur if extra-ordinary measures are subsequently enacted? In Chap. 2, Heinrich and Szulecki proposed a distinction between security jargon and securitisation proper, the former merely referring to threats to the referent objects but not proposing concrete measures at all—either extra-ordinary or "normal". The empirical chapters, especially by Heinrich as well as Szulecki and Kusznir, have shown how problematic that distinction can be in practice, especially since framing security and identifying threats can influence the broader discursive and political context in which energy policy decisions are taken. Within the poststructuralist approach of the Copenhagen School, it becomes very difficult to justify a distinction between security jargon and securitisation proper, because the implicit causal link between a securitising move and audience acceptance of extra-ordinary measures is not sustainable. On the other hand, the way an increasingly securitised political debate remoulds actors' identities and perceptions becomes paramount—blurring the conceptual distinction proposed by Heinrich and Szulecki.

Third, what counts as extra-ordinary? Can this be decided *a priori*, or is it dependent on the particular situation in which actors find themselves? In this volume, extra-ordinary measures were categorised based on three types of action: (1) breaking norms (which are explicit or implicit prescriptions about "how things are done"), (2) shifting competences and power towards the executive or a specialised agency and (3) withholding or limiting information. Any one or a combination of these can be seen

as "extra-ordinary measures" if they are legitimised by reference to security; however this might not cover the full range of measures that go beyond the bounds of "normal politics".

3 Sectors and Logics of Energy Security

This overview of the strengths and weaknesses of the Copenhagen School suggests that although the framework can be useful for examining constructions of energy security, it will often be necessary to go beyond a strict and rigid application of its core concepts. In particular, it is worth considering whether the Copenhagen School's core logic of security is the most appropriate means of conceptualising securitisation. In this section, we focus on two possible ways of examining the development of (energy) security discourses that build on, but also deviate from, the Copenhagen School—sectors of security and logics of security.

3.1 Sectors of Security

Sectors are an important element of the Copenhagen School, yet they have received remarkably little attention within Securitisation Studies as a whole.[1] This is surprising because the majority of *Security: A New Framework for Analysis* is devoted to an examination of how securitisation plays out within five distinct sectors—military, economic, political, environmental and societal. These sectors are conceptualised as "lenses or discourses rather than objectively existing phenomena […] defined by particular constitutions of referent objects and types of threats as well as by specific forms or 'grammars' of securitisation" (Buzan et al. 1998: 27). As discussed in the previous section, these "grammars" mean that although there is one national/military logic of security, the "essential quality of existence" can differ between sectors. This also has an impact on the "specific types of interaction" between actors within each sector:

> The military sector is about relationships of forceful coercion; the political sector is about relationships of authority, governing status, and recognition;

> the economic sector is about relationships of trade, production and finance; the societal sector is about relationships of collective identity; and the environmental sector is about relationships between human activity and the biosphere. (Buzan et al. 1998: 7)

The obvious question to ask at this point is: what sector(s) can energy be situated within? The Copenhagen School treats energy as a "tradable good on the global market" and therefore as an economic referent object. Such an interpretation is problematic however, because it reduces energy to oil, and energy security to concerns about oil supplies. This is largely a function of how energy issues entered International Relations in the first place. International Political Economy was, as Hancock and Vivoda argue, "a field born of the OPEC crisis" (2014: 206) which largely reduced the discussion of energy to oil, and viewed energy supply shortages as a problem which could best be addressed through the spread of liberal market norms. When we consider that the Copenhagen School largely rule out the possibility of securitising economic issues under such a liberal world view, it is clear that such a perspective can be limiting and may fail to get to the heart of how energy securitisation functions (Judge and Maltby 2017: 185).

Others have used the concept of sectors more productively when examining energy issues. Natorski and Herranz-Surrallés (2008) argue that energy is a cross-cutting issue which could potentially be examined within each of the five sectors. Christou and Amadides (2013) go one step further, arguing that the sector within which energy is securitised has consequences for the kind of political effects that it generates. Such approaches open up the possibility of different sector-specific grammars of security playing a role in how energy is constructed as a security issue. For instance, if energy is securitised as an "environmental" issue, then the focus may be on mitigating the damaging effects of burning fossil fuels, whereas if it is securitised as a "military" issue, then the focus may be on the potential for external suppliers of a resource to coerce a state.

There is, however, another possibility worth considering—that energy should be viewed as a distinct sector of security. Such a development is not without precedent. Hansen and Nissenbaum (2009) argue that "cyber security" should be regarded as a distinct sector, constituted by a

unique configuration of referent objects and threats. A similar attempt could be made in the case of energy security. One of the benefits of such an approach is that rather than ultimately reducing energy to other sectors, this places the question of what, if anything, is specific about energy security at the forefront of our analysis.

In terms of referent objects, there has been a tendency to view energy supplies as the core referent object within claims about energy security. Such an approach is understandable but is often based on a misunderstanding about what referent objects are, that is, "things that are seen to be existentially threatened and that have a legitimate claim to survival" (Buzan et al. 1998: 36). In many cases where energy is being "securitised", it is not the energy supplies that have the legitimate claim to survival. Instead, they are the means through which survival of some other referent object is secured. This similarly applies to other common objects such as energy demand, infrastructure and prices. Bridge (2015) makes this point when he identifies three "logics" of energy security: sovereign state security, population security and vital systems security. Each of these logics is based around different referent objects: states, societies and energy systems. The first two objects could ultimately be traced back to other sectors—military/political and societal, respectively. Energy systems cannot, however, and if we follow Cherp and Jewell in defining energy security in terms of the "low vulnerability of vital energy systems" (2014: 415), then this may provide a basis for a distinct security sector with its own forms of interaction.

Supply interruptions may constitute the main threat to such systems; however, the sources of such threats and the degree of harm they cause may vary. A temporary blackout in the power grid, an inadequate supply of gas during a cold winter, volatile prices disrupting the economic rationale for different energy sources, or a terrorist attack on a nuclear power plant are all threats to energy security, but all have different real impacts on energy systems.

What we mean by "energy systems" is fundamental for whether we can entertain the possibility of energy as a distinct sector. Cherp and Jewell define these as "resources, materials, infrastructure, technologies, markets and other elements connected to each other stronger than they are connected to the outside world" (2013: 151). The idea that energy systems

are a set of distinctive referent objects means that we can disentangle securitising moves that refer specifically to these systems from moves about other objects (e.g. framing "negative" energy prices as a threat to national security might actually refer to the economic sector; securitising greenhouse gas emissions as a major cause of climate change might refer to the environmental sector, etc.). This helps to maintain the normative edge of Securitisation Studies, by helping to specify which vulnerabilities can—intentionally or not—be exaggerated. Moreover, the perception and treatment of an energy system as "vital" could be a prerequisite for its securitisation. This suggests that one avenue for future empirical research would be to examine which energy systems are considered "vital" and why. This is an avenue where some of the empirical studies in this volume have already made important progress.

3.2 Logics of Security

Regardless of whether energy is seen as a distinctive sector or not, another promising avenue is to examine what logics of security are most common in attempts to securitise energy. Logics of security go beyond a focus on referent objects and threats, to examine what may be termed the underlying rationality embedded within a security discourse.[2] Rather than reducing all security discourses to sector-specific variations on the Copenhagen School logic of existential threats that lead to extra-ordinary measures and political action, they open up the possibility of alternative logics that deviate from an exclusive focus on existential threats to survival. These could take the form of general logics of security that are applicable to multiple sectors, or logics that are specific features of a sector and may indeed strengthen the case for considering that sector as distinct from others. We consider both these options below.

The idea that there may be other general logics of security is at the core of many critiques of the Copenhagen School. In particular, the Paris School has criticised the Copenhagen School for privileging an understanding of security which is derived from how the term has been used in the realm of "international security" to the exclusion of meanings derived from the field of internal security, where the policing of risks and vulnerabilities have arguably

been more prevalent (Bigo 2002). Risk is perhaps the most notable alternative to a Realist logic of security because, as Williams argues, since the end of the Cold War, western security policies and institutions have become increasingly orientated towards the management of risks rather than the elimination of existential threats to survival (Williams 2008). The policies adopted during the War on Terror are frequently cited as examples of constructing and dealing with insecurity, through precautionary actions to insure against potential harm and increase the resilience of political systems (Rasmussen 2004; van Munster 2005; De Goode 2008).

Corry argues that such security constructions and policies can be understood as part of a distinct logic of riskification, which focuses on indirect causes of harm that put the governability of referent objects at risk, in contrast to the focus of the Copenhagen School on direct threats to the survival of a referent object (Corry 2012). Such a logic leads in a different policy direction than existential threats towards, "programmes for permanent changes aimed at reducing vulnerability and boosting the governance-capacity of the valued referent object itself" (ibid: 248). A logic of riskification may, at least at a discursive level, more accurately describe the form that security constructions take within the energy sector, although this is fundamentally an empirical question (Judge and Maltby 2017: 183; Lis (Chap. 4) in this volume). Examining whether energy security is constructed in terms of existential threats or risks in different contexts may allow for a more accurate account of what kind of security concern energy is regarded as in different contexts.

That being said, drawing a sharp distinction between these two logics is not without its problems. It makes the somewhat questionable assumption that risk can be reduced to a single essence—the very same problem with the Copenhagen School's logic of security. Risk is, of course, a much more complex and varied concept than this implies (Petersen 2012), as are risk-related concepts such as "resilience" (Lundborg and Vaughan-Williams 2011; Bourbeau 2013). This could be viewed as a key avenue for future research on energy securitisation/riskification—an examination of how risk is constructed in various contexts. Indeed, because of the prevalence of risk-related discourses and practices within the energy sector, it could serve as a useful empirical site for developing how the concept of risk is understood within Security Studies.

Rather than deductively applying general logics to the energy sector, an alternative approach would be to examine inductively how security is constructed within the energy sector itself. This would make it possible to develop a more empirically grounded understanding of what energy security signifies in different contexts, or to highlight the contested nature of energy security within those contexts. The most fully developed attempt at such an analysis is by Ciută, who has examined the various ways in which the concept of energy security is used by academic researchers and political organisations. He distils these into three distinct logics of energy security, which involve different configurations of threats, political values, policy measures and forms of political action—war, subsistence and total/banal security.

The logic of war portrays energy as, "a cause or an instrument of war or conflict" (Ciută 2010: 129). It includes constructions of energy as a weapon that can be deployed against dependent consumer states, as well as the idea of resource wars or as an indirect cause of conflict through environmental degradation, political strife within states and competition for resources. It is an inherently geopolitical, and often militarised, understanding of security that involves a distinct rationality of political action based on the application of strategic and military thinking to energy issues. It therefore involves the subordination of the concerns of various actors to the geopolitical objectives of the state.

The logic of subsistence, in contrast, views energy as a public good which people need rather than being bound up in war and conflict. Such a need "is not driven by the imperative to survive, but by the functional demands of various sectors of activity, which means its absence does not lead to extinction, but to dysfunction" (ibid: 132). Moreover, because it is a public good, it involves a wide range of actors across different fuel types (gas, nuclear, wind, solar, etc.) and sectors of activity (production, transport, etc.). As a result, the specific meaning of energy security can vary substantially between these actors due to their different levels of involvement. Perhaps more importantly, it also does not result in a particular type of policy response because, "energy security policies [are] non-specific as *security* policies. If market failure is the key problem for energy security, then the solution is application of generic policies designed to improve market functionality" (ibid: 134, emphasis in original).

Finally, the logic of total or banal security is an extreme extension of the previous logic. Because energy is an essential public good that involves such a plurality of actors, there are a huge number of potential threats to different aspects of energy supply, and potentially every actor can be called upon to change their behaviours to increase security. This in turn leads to investing "every single object of any kind with and in security", resulting in the "security of everything…everywhere…against everything" (ibid: 134).

As Ciută notes, both the logics of subsistence and total security overlap with a risk-based approach to security (see Heinrich and Szulecki (Chap. 2) in this volume). Likewise, a logic of war overlaps quite clearly with the Copenhagen School logic of security. Ciută's logics are, however, more nuanced than either of these two approaches, and more likely to capture the specific dynamics of the energy sector. The extent to which these logics can be identified in attempts to securitise energy would, moreover, lend even greater support to the idea that energy represents a distinct sector of security composed of different referent objects, threats and logics. Examining whether this is the case should be a major focus of future research on energy securitisation.

4 The Process of Securitisation: Audiences, Context and Causality

So far, we have examined alternative ways in which discourses of energy security can be analysed, through sectors and logics of security. While such avenues are undoubtedly worth pursuing, a focus on discourse risks losing sight of the fact that securitisation is an inherently social process. Many critiques of the Copenhagen School have sought to address this shortcoming, which has led to various sustained efforts at rethinking major elements of the theory that have pushed the field in a more "sociological" direction.

"Sociological" approaches place a far greater emphasis on the process of securitisation. Such approaches, which are often contrasted with the "philosophical" approach of the Copenhagen School (and Corry's riskification

framework), downplay the performative force of speech acts uttered by securitising actors and instead engage in a deeper examination of the role that audiences and contextual factors play in shaping this process. As Balzacq argues:

> securitisation is better understood as a strategic (pragmatic) process that occurs within, and as part of, a *configuration of circumstances*, including the *context*, the *psycho-cultural disposition of the audience*, and the *power that both speaker and listener bring to the interaction* […] Securitisation can be discursive and non-discursive; intentional and non-intentional; performative but not 'an act in itself'. (Balzacq 2010b: 1–2, emphasis added)

Within this understanding of securitisation, discourses of security remain central but they are also not theorised according to a simple sender-receiver model of communication between an empowered securitising actor and a passively recipient audience. Instead, they are influenced by the circumstances within which this communication occurs. In other words, both the social interaction of actors and audiences and the context features of the situation in question. In this section, we focus on these two features before returning to an issue raised in the first section of this chapter—what this means for whether or not we should regard securitisation as a causal theory.

4.1 Audiences

The most obvious way in which most sociological approaches depart from the Copenhagen School is in their more extensive theorisation of "audiences". Their central insight is that although particular authoritative actors may be dominant in some circumstances, in many cases, securitisation success or failure will be a result of a network effect based on the dispositions of, and power relations between, multiple securitising actors and audiences. As a result, audiences should be regarded as the central actors in the securitising process, because ultimately their acceptance or rejection of securitising moves will be decisive in whether securitisation is successful or not (Balzacq 2010a: 8–11).

Shifting the focus of analysis from securitising actors to audiences could be a particularly useful research strategy when examining energy securitisation because in the energy sector, multiple actors beyond "the state" may claim the right to "speak security", and deliberations among these actors are likely to lead to different conceptions of energy security than standard or alternative logics of energy security would suggest. Indeed, Ciută (2010) argues that one of the defining features of the logics of subsistence and total security identified in the previous section is that they are constituted by a plurality of actors/audiences who are involved across multiple sectors of activity. There are at least two areas where analysts may then want to focus their attention.

First is by differentiating between different types of audience that play a role in the securitisation process. In various empirical studies of securitisation across a wide range of issue areas and types of political system, it is clear that there is no single "type" of audience that is always the most important for accepting or rejecting securitising moves. Wæver himself has acknowledged that the lack of differentiation between types of audience is a shortcoming of the Copenhagen School framework, not least because what counts as a "relevant" audience will differ between sectors and contexts (2003: 25). Identifying such audiences can be difficult because, as Vuori argues, audiences have different abilities to, "provide the securitising actor with whatever s/he is seeking to *accomplish* with the securitisation" (2008: 72). An important step, however, is to develop a clearer understanding about what types of audience could in principle "matter" in concrete situations. One attempt by Salter (2008) distinguishes between popular, elite, technocratic and scientific audiences. These categories are derived from the specific field of airport security, but are designed to be general enough to apply to a variety of security issues across sectors. One of the core questions for analysts of energy securitisation is whether these categories are appropriate or if alternative categorisations, perhaps incorporating military, economic, and activist audiences, would be more suitable.

Second is by paying greater attention to power relations between securitising actors and audiences. Not only do different audiences play different roles, they also have different kinds of relationship with securitising actors. These are structured by both formal and informal power relations,

which, in most cases, pre-date attempts at securitisation and are often institutionalised within particular political systems even if one of the possible outcomes of securitisation is that those power relations are subject to change. The relations between actors and audiences should not be understood in a static and unidirectional manner, where a securitising actor has the power to compel or influence different audiences to varying degrees. Instead, it is important to recognise, as Côté (2016) argues, that audiences are active agents that can contest, develop, and potentially transform securitising moves in a process of deliberation. Rather than being passive recipients of securitising moves, audiences have agency, and there is no reason to assume that securitising actors will always get their own way. A key task for future research on energy securitisation is to pay greater attention to the power relations between securitising actors and different types of audience.

There are significant methodological challenges involved in measuring audience acceptance. How do we know if a given securitising move is accepted by the expert community and the society at large? This question is of fundamental importance to all causally oriented and explanatory studies of securitisation, but there are no easy answers. Rather than focusing on the acceptance of a single move, however, we can approach the question slightly differently. Instead, one can look at the wider acceptability of expressing energy issues in the language of security and applying extra-ordinary, non-political measures outside democratic control to the energy sector. To grasp the acceptability of a securitising move—understood as the willingness of a relevant audience to agree on a securitising frame—we need to disentangle securitisation as a process that takes place in a broader context, both material and ideational, which is difficult to change with individual speech acts (McDonald 2008). Thus, by studying discourses dominant in the energy sector, security imaginaries or other intersubjective structures of meaning, we can establish whether certain audiences are more or less prone to accepting securitising moves.

An example of moving energy security studies in that direction is perhaps the research of Fischhendler et al. (2015). They point to the fundamental importance of national security discourses that dominate other debates, serving as a reservoir of narratives and rhetorical commonplaces that spark securitisation in areas far from usual security concerns. These

observations are very important for studying energy securitisation beyond the usual "high politics" of oil and gas, but also for understanding different securitisation modes in these sectors. That is in turn illustrated by Fischhendler and Nathan's (2014) study of Israeli natural gas exports as an issue of "national security". Together with Casier (2011), Godzimirski (2009), Judge et al. (2016) as well as Siddi (Chap. 10) in this volume, and echoing Guzzini's (2013) and colleagues' analyses of the "return of geopolitics", Fischhendler et al. provide us with much food for thought about how securitisation of different issues—including energy policy—seems to be facilitated in some contexts while it is less probable in others.

4.2 Context

It is clear that securitisation does not occur in a vacuum, but within a social situation that undoubtedly shapes the manner in which this process unfolds. This is not reducible to the relationship between securitising actor and audience(s), but can involve factors ranging from proximate features of the particular "setting" where securitisation occurs to more distant elements such as political, economic and cultural environments (Balzacq 2010b: 37). This poses additional methodological challenges for analysts, because it is impossible to account for the influence of every single contextual factor on any social process. It should, however, be possible to identify some of the most important factors within particular sectors of security by focusing on relatively stable features or characteristics of the major referent objects. This is the approach taken by Judge and Maltby (2017), who argue that in the energy sector there are at least two sets of relevant contextual factors that can be derived from the observation that energy is a socio-technical system—technical and political economic (see also Szulecki 2016).

Technical factors—or to use language drawing on Bruno Latour (2005), the materiality of energy systems—are concerned with what is often referred to as the "geography" and "hardware". Judge and Maltby describe these as:

> an assemblage of a particular mix of fuels in overall consumption and electricity production, the sources of these supplies (imported/domestic),

> established roles for particular types of energy in particular economic sectors, and a configuration of physical infrastructure including the capacity to import, produce and transmit. (2017: 184)

However, it is important to not simply view technical factors as "material facts" which place hard limits on the kinds of discourses and social dynamics that are possible. Discourses about energy, regardless of whether they embody claims about security, or not, all represent the elements of this space and materiality in various ways. However, their representations are also constituted by these material conditions. While a state can claim that it wants to be energy independent regardless of whether it has the physical resources to do so, these material conditions also play a role in the plausibility, sustainability and contestability of these claims. As is often observed, transformations of energy systems are highly path-dependent social processes, as changes through the development of new generation or transit infrastructure are often difficult, time-consuming and expensive (Stirling 2014).

Political-economic factors, by contrast, are concerned with the conditions under which energy is produced, traded, and used, and how those activities are regulated (Judge and Maltby 2017: 184). Dannreuther similarly argues that political economy, "has a determining effect on which particular securitisation of energy assumes dominance" (2015: 467), and that "what actually gets securitised is decisively shaped by material power relations" (2015: 468). While this may be too deterministic a reading, it is nonetheless important to examine how pre-established structural conditions may play a role in shaping the form, dissemination and success or failure of securitisation. At a minimum, the power relations between actors are shaped by their positions and roles within a particular political economic system. However, this type of contextual factor goes further, by focusing on how systems of energy governance structure actor interactions in ways that are not reducible to power relations. They include norms, policy paradigms, and institutionalised systems of regulation that together constitute the "rules of the game" (Belyi and Talus 2015; Kuzemko, et al. 2016).

Judge and Maltby distinguish between two main systems of energy governance: "market-led governance" based on a deregulated economy in

which market participants are the primary actors and "state-led governance" based on tightly regulated economy in which markets are subservient to the political objectives of the state (2017: 184–185). These are, of course, somewhat crude ideal types, and future research in energy studies as a whole would do well to better differentiate between systems of energy governance. Moreover, it is not clear that systems of energy governance are confined to the internal political economy of a state. Multilateral and supranational institutions also play a structuring role, as do the ways in which international actors of all kinds pursue their foreign policies. In a recent article, Prontera (2017) argues that in Southeastern Europe there have been three forms of "state model" in the gas sector, which he associates with different patterns of energy diplomacy: partner states, provider states and catalytic states. The latter is particularly interesting, as it combines a network form of energy diplomacy with an active role for government within a market structure. This would suggest that future research should develop more precise and nuanced conceptualisations of systems of energy governance, as a first step towards examining what role they place in the process of securitisation.

4.3 From Audiences and Context to Securitisation Dynamics

Our discussion of "sociological" approaches has focused primarily on paying greater attention to key factors that were undertheorised in the Copenhagen School's original securitisation framework. What has not been examined is the way in which sociological approaches understand causality. More precisely, what are the implications of shifting from a mainly poststructuralist understanding of securitisation (performative speech acts) to a more sociological approach in which multiple factors may potentially have an influence on the securitisation process? This may seem like a somewhat abstract question, but it actually goes to the heart of what distinguishes sociological approaches from the Copenhagen School and other philosophical approaches. It also has major implications for future research on energy securitisation and the wider field of Securitisation Studies, because empirical research that is unclear about its

methodological assumptions is likely to be logically inconsistent and potentially flawed (Jackson 2011).

The Copenhagen School has a somewhat ambiguous understanding of causality. On the one hand, from a soft constructivist standpoint, it outlines a causal sequence: securitising move, acceptance by an audience, creation of a platform where the adoption of extra-ordinary measures becomes possible. This is the approach adopted by Heinrich and Szulecki when building the framework for the empirical studies presented in Chaps. 3, 4 and 5. This causal sequence is what allows securitisation theory to be considered an explanatory theory—the completion of all these steps leads to successful securitisation and the production of substantial political effects. On the other hand, from a poststructuralist standpoint, the Copenhagen School cannot meaningfully develop such a causal sequence because discourses are unstable and incomplete structures of meaning which cannot be traced back to a set of initial causes. Moreover, they are constitutive of social action rather than being distinct from such actions, and therefore cannot be said to "cause" the substantial political effects that are associated with securitisation. This tension between understanding the Copenhagen School framework as a causal or constitutive theory is at the heart of Heinrich and Szulecki's distinction between security jargon and securitisation proper in Chap. 2.

Sociological approaches attempt to resolve this tension by developing a different understanding of causality. Balzacq, for instance, in pushing securitisation theory away from a focus on the "security speech act", argues that a causally deterministic account of securitisation is untenable. Instead, he proposes that researchers investigate the, "degree of congruence between different circumstances driving and/or constraining securitisation" (Balzacq 2010a: 18). This makes sense if we consider that under a sociological understanding, multiple actors and audiences may be involved in deliberations about whether something is a security issue or not and what that means, while these interactions will be shaped by the full range of contextual factors identified above. This is why Balzacq views these various factors as part of a "network of causality", which it is the task of analysts to examine rather than assuming there is a single factor which is causally significant to the exclusion of others (ibid., 18).

An alternative and more sophisticated approach to understanding causality comes from Guzzini (2011), who suggests that there may be value in reconceptualising securitisation as a "social mechanism" as a sounder basis for viewing it as an explanatory theory. Balzacq has also used the terminology of "mechanisms", by which he means the processes of persuasion, propaganda, learning and socialisation that may be involved in the process of securitisation (2015: 106). That idea is somewhat debatable however, as it would either make securitisation a mechanism of some higher echelon—a kind of "molecular mechanism" to use Elster's term (2007: 42–44)—or an unspecified theoretical construct that is reducible to more foundational mechanisms.[3] Guzzini develops a richer account of securitisation as a social mechanism, based on the understanding of mechanisms as focused on "how" causality rather than the "what" causality of correlational analysis (including Balzacq's examination of the congruence of different forces).

"How" causality allows for the analysis of action "embedded in a process that, despite its focus on structures (security imaginaries, identity discourses, cultures of anarchy), institutional processes and their path dependencies, is basically open, since it is contingent on a series of contexts and factors" (Guzzini 2013: 276). This opens new spaces for reconstructing securitisation as an explanatory theory, which can account for certain outcomes and explain the causal pathways that lead there. His article can be read both as a plea for critical realist or analyticist reframing of securitisation.

Two important points have to be made clear. Firstly, both Guzzini's "mechanismic" securitisation and Balzacq's "sociological" securitisation move the emphasis away from the securitising speech act. Guzzini suggests that "the idea of a speech act refers here to a process, not a kind of single bombshell event" (2011: 334). The latter seems to have been the most common misinterpretation of the initial theorisation by the Copenhagen School scholars—and one with far-reaching consequences. In a similar vein, Balzacq does not mention the actual speech act among the "essentials" of his ideal type of securitisation outlined above (Balzacq 2015).

Understanding securitisation as a process or a mechanism, with the speech act becoming of lesser importance, we have to bear in mind that

the kinds of evidence we are after is not as simple as "I hereby declare this a security matter". In fact, the word security does not have to be uttered at all for a specific statement to add to a gradual buildup towards security, and clearly does not have to be mentioned in de-securitising moves. Approaching energy securitisation from this perspective helps us overcome the theoretical and methodological problem signalled earlier in this chapter, regarding the definition of a securitising speech act. This idea is well captured by the empirical study by Fischhendler and Nathan (2014: 156), who cast their net widely in a meticulous content analysis of committee public hearings. For them it was not "security" as such, but "existential language" that was the indicator of securitisation—"a sense of urgency, prioritisation, and/or survival, [expressions] centered on threat and risk", etc.

What we are left with, however, is an unresolvable methodological question in the broader, philosophically derived sense of "methodology" as proposed by Jackson (2011): do we want an explanatory theory of (energy) securitisation? This is often a matter of individual preference, but there is also an important dividing line running between the philosophical and sociological approaches as well as the "thinner" readings of the Copenhagen School. Floyd has argued against the inclusion of context in securitisation as that "would change the theory beyond recognition, moving the focus away from the act that is securitisation, toward a causal theory of securitisation instead" (2010: 21). Yet this supposedly destructive move is, from a different point of view, the only sensible one, as securitisation theory has arguably always been a causal theory. If anything, it carries a "hidden causal argument" and an implicit explanatory aim (see Jackson 2017). Building on Balzacq and especially Guzzini's proposals allows us to be more outspoken about the non-positivist causality of the securitisation model, and explore the ways in which energy becomes security through interpretive process tracing, possibly in combination with other methods such as discourse or content analysis (Szulecki 2016). This will allow us to both understand specific examples of energy securitisation, and explain how certain outcomes came about at that particular moment and in that context.

Notes

1. The other theory that is examined with the Copenhagen School's 1998 book is Regional Security Complex Theory. Space precludes a discussion of this theory; however there has been some interesting work on how a regional security complex centred around energy supplies has emerged between the EU and Russia (Kirchner and Berk 2010; Maltby 2015). There is clear potential for further work in this area in light of developments since the 2009 gas supply disruption.
2. Although as noted above, Bridge (2015) refers to different logics of state, population and vital systems security, his primary concern is with the different referent objects that these entail rather than alternative security rationalities.
3. In much the same way as Schelling proposed that "theory may comprise many social mechanisms, but also a social mechanism may comprise many theories" (1998: 33).

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Part II

Europe's External Policy Challenges: Critical Perspectives on Energy Security

7

Taking Security Seriously in EU Energy Governance: Crimean Shock and the Energy Union

Kacper Szulecki and Kirsten Westphal

1 Introduction

Over the last five years, the European Union (EU) has seen important shifts of emphasis on its main energy policy priorities. The drive for cost-efficiency and competitive energy supply, growing out of the Eurozone crisis, was met with supply security and geopolitical risk considerations in the aftermath of the 2014 annexation of Crimea and the war in Eastern Ukraine. At the same time, with the 2015 Paris Agreement, Europe reaffirmed its commitment to long-term decarbonisation. Following the 'Energy Union' proposal, put forth in 2014, external and internal energy governance is on the table in an attempt to resolve tensions on two levels.

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One is the continuous need to find the right balance between policy goals in the so-called energy policy triangle—securing stable supply, maintaining economic competiveness and safeguarding environmental sustainability. Next to balancing the 'policy triangle', there is also the constant need to square the circle of internal EU energy governance, which is faced with the tension between growing European harmonisation with increased competences of the European Commission (EC) and the principle of Member State sovereignty over national energy mixes.

Initially proposed by the then Polish Prime Minister Donald Tusk, the Energy Union has been fleshed out by the incoming Jean-Claude Juncker's Commission as one of its 10 priorities (European Commission 2017). The Commission specified five dimensions of this energy policy strategy: energy security, solidarity and diversification; an integrated internal market; energy efficiency; decarbonisation; and innovation, research and competitiveness. It broadened the earlier focus on energy security, in an attempt to bring together 28 energy agendas of the Member States (MS).

Writing an article for 'Global Policy' at the onset of the Ukraine crisis in 2014, we listed five 'cardinal sins' of European energy non-governance. We identified deeply entrenched problems and argued that they resulted from political and infrastructural legacies, varying interests and national strategies, as well as the EU's own institutional framework. The five sins were the tension between national sovereignty and common European governance, a navel-gazing policy orientation, a segmented internal energy landscape, the overlooked and ill-defined rationale of energy security and a backlash against sustainability that impedes an energy transition (Szulecki and Westphal 2014).

Can we see a new idea for balancing the 'energy triangle' emerging, and what is the understanding of energy security driving it? In this chapter we argue that the Ukraine crisis was a shock for European energy non- or (at best) reluctant governance. The question now is whether that challenge has been turned into opportunity and if so, what progress we can see in eradicating the five cardinal sins discussed earlier. Or, to the contrary, will we see a deepening of the existing rifts, a further disintegration beyond the 'Brexit' or a core EU moving forward?

In the remainder of this chapter, which also serves as an introduction to the following contributions providing critical perspectives on the understanding and practice of EU energy security, we proceed as follows.

First, we sketch the increasingly fluid geopolitical environment and the global challenges, which European energy policy has to address: shifting demand, the problem of energy access and changing global energy governance architecture. We then turn to internal issues, highlighting a split over economic efficiency, divergent climate policy ambitions, the tension between market-oriented and statist energy policy approaches, and problematise the perceived trade-off between security and sustainability. We conclude with a strong argument for streamlining energy and climate policy, as well as energy sustainability and security, in a longer-term EU energy strategy framework that seems to be emerging. We also emphasise the need for an approach to energy security moving beyond supply security—a point to which many of the following chapters return, each in their own way.

2 The External Environment: Geopolitical Shifts and Lingering Uncertainty

Since 2010, energy policy is conducted in an environment of ongoing rapid and fundamental shifts in the global energy landscape—which the International Energy Agency (IEA) described as facing 'unprecedented uncertainty' (IEA 2010, p. 45).) While global geopolitical shifts are perhaps of a more fundamental nature in the long run, the long-awaited impulse to reconceptualise EU energy governance came as a result of events in its near neighbourhood. The major energy supplier to the EU, Russia, has challenged the European security order with the annexation of Crimea and destabilisation of Ukraine. This constitutes a new security challenge by quality and nature (Szulecki 2016). Moreover, it touches on the strong belief in economic rapprochement and change which has its roots in the 1970s interbloc détente policy (Högselius 2013). The functional understanding of interdependence (see Kustova, Chap. 8, in this volume) is being challenged and reduced to a dual strategy of deterrence and economic cooperation,

at least by some Member States. The unprecedented level of uncertainty is then neither a mere dramatisation nor a sound bite designed to attract media attention to the already prominent sector.

2.1 An Era of Plenty?

One of the particularities of fossil fuels is their uneven geographic distribution, which, combined with their political relevance results in the geopolitical dimension of energy, necessitates large-scale global trading and is the source of perceived energy insecurity (Yueh 2010, p. 216). While conventional hydrocarbons are concentrated mostly in the 'strategic ellipsis' stretching from West Siberia and the Caspian Basin into the Middle East, unconventional hydrocarbons and/or hydrocarbons in unconventional reservoirs have fundamentally changed the picture. It is thus not surprising that especially the former losers of this geological resource lottery welcome the emergence of unconventional energy sources—for example, shale gas and oil.

Technological progress *and* high oil prices helped to enlarge the resource potential between 2009 and 2014. Offshore, pre-salt and deep sea as well as Arctic fields were part of that new landscape. Another shift in the gas markets is driven by the worldwide sea transport of liquefied natural gas (LNG) and the construction of long-distance pipelines, together turning gas from a regionally to a nearly globally tradable commodity (Hirst and Froggatt 2012, p. 5). These recent developments, resulting from technological innovation, a high oil price level as well as global warming when it comes to accessing permafrost zones and sea passages, have put a question mark behind 'peak oil'—at least for the time being. Some experts even speak of 'fossil fuel abundance' (Browne 2013; compare Claes, Chap. 12, in this volume). This has led to an interesting discursive shift, in which the notion of 'peak oil'—visibly postponed—is instead replaced by the industry's and exporting state's concerns with 'peak oil demand'. The strong drop in oil prices seen in 2014 might therefore not be part of the usual conjuncture cycle, but rather we might see prices of hydrocarbons stay 'low for longer'.

Moreover, the growing expansion of renewable energy—with the most rapid acceleration ever seen in the development of the energy mix—adds to the picture. We have witnessed steep cost declines for onshore wind (now seen as a mature technology no longer in need of additional support, and certainly not beyond 2030) and offshore wind, and plummeting costs of solar photovoltaic (PV). All this adds up to an image of an *era of plenty* where energy demand will not be growing at the same pace as supply from different resources.

At first sight, this might seem like a fairly benign environment for energy importers and good news for European energy governance, as in a buyers' market the rules of the game are generally defined by consumers (Mommer 2000, 2002). This can be somewhat misleading. The reason is that given the large and geographically distributed resource basis, 'above ground' political and regulatory decisions determine whether, where and when fields will be exploited. The geopolitics of energy are unfolding with new dynamics, for example, the United States (US) as a new energy producer or the Middle East as an emerging centre of demand, positioning themselves on opposite course. The long-held tenet that the world's primary conventional energy resources, especially oil, are concentrated in 'a handful of volatile countries' (Goldthau and Sovacool 2012, p. 233) might still play out, as the Middle Eastern low-cost producers are expected to exploit their competitive edge and thus remain the backbone of the world's oil supply in a carbon-constrained world (IEA 2016).

Yet, the fracking revolution in the United States has had a structural effect on the global oil and gas market. That is because the resources from shale and tight geological rock formations can be extracted rapidly, upon price signals and in smaller volumes, resembling rather a manufacturing process than large-scale high upfront cost endeavours like those typical for conventional oil and gas production. While energy markets have faced an oversupply and relatively low prices, the geopolitics of energy remain a major unknown (Rühl 2014). The unconventional revolution and the low oil price level are shaking the stability of fossil fuel-abundant countries, putting a question mark behind their oil-price-driven economic models and the fiscal revenue basis as mere rent-seekers. This is,

above all, affecting the Middle East and North Africa (MENA) region already in great disarray and increasing socio-economic instability in the EU's neighbourhood.

Shale gas fracking, while taking some of the security of supply pressure off, adds further environmental risks—both global, such as the carbon footprint from wellhead to combustion, and local, that is, due to possible water supply and pollution (compare Lis' Chap. 4, in this volume). Moreover, environmental activists rightfully point to the risks of perpetuating fossil fuel dependency.

Furthermore, fracking has dramatically improved the energy situation for the United States, facilitating 'America First' policies and the use of statecraft, for example, in sanctioning major energy producers such as Iran and Russia. Moreover, it is putting the United States, on a completely different trajectory from its Organisation for Economic Co-operation and Development (OECD) partners, in terms of resilience and energy patterns. It is also giving the United States a competitive edge over other OECD economies as gas prices are and most likely will remain lower compared to Europe or Japan. This second geo-economic dimension of the shifting patterns of global fossil fuel supply adds to the general uncertainty, as the energy mixes and pathways are increasingly divergent across and among regions, while Europe is increasingly becoming the odd-man-out, the 'liberal actor in a realist world' of statist energy politics (Goldthau and Sitter 2015).

The developed countries of Europe and North America for years have grown accustomed to significant import dependency, especially on oil and gas. They thus built their leverage on *interdependence* with hydrocarbon suppliers (see Godzimirski and Nowak, Chap. 9, in this volume). Developed energy consumers tried to govern the global energy sector through the IEA, balancing the influence of the Organization of the Petroleum Exporting Countries (OPEC) (Colgan et al. 2012). As described above, this 'energy importers alliance' is fundamentally changing with North America gaining self-sufficiency due to growing indigenous supplies and also because of the increasing energy efficiency of the power and transport sectors. Despite the unexpected supply revolution, demand will be the determining factor of the energy markets. Falling US demand for LNG and oil has already impacted the Atlantic region's

energy market. Moreover, the new supply of fossil fuels is met with rapid shifts in demand in Asia, as well as in the Middle East. China is now the largest energy consumer in the world, with India following.

2.2 Navigating Europe Towards Decarbonisation

As a consequence, the European Union is now finding itself increasingly 'sandwiched' between the energy-hungry Asian economies and a self-sufficient and self-interest-led United States. This can undermine the EU's position as a major and influential hydrocarbon importer. Moreover, developing economies promise to be growing markets, which is turning them into attractive destinations for infrastructure investments and long-term supply contracts. These new leading consumers are pushing for changes in the rules that govern global energy markets, all in all creating a global landscape which is more *heterogeneous* and characterised by increased *protectionism*—challenging the aspiration for a level playing field and liberalised trade that are part of the IEA legacy. Goldthau (2012) argues that after the statist paradigm that dominated most of the twentieth century, and the liberal, market-oriented paradigm that replaced it in the 1980s and 1990s, we have recently witnessed the emergence of a new *interventionist* paradigm, under which growing resource nationalism meets the concerns of 'energy geopolitics' both in Europe and globally. This parallelism of trends may well see the balance shaken in favour for mercantilist and state-led approaches—and these two logics are also clashing in the EU's internal policymaking, to which we shall return.

In contrast to the United States, the EU has to act from a position of relatively decreasing market shares, also due to decarbonisation aims, and without providing long-term predictability of demand, particularly important from the point of view of suppliers (Sharples 2013). This may translate into decreasing political influence to shape hydrocarbon governance.

As an increasingly passive 'taker' of the developments in a *conventional* energy world, the EU has more power to shape and gain in a *sustainable* (i.e. low carbon) energy world. From the perspective of an energy consumer,

accelerating diversification by using more renewable energy is a means to hedge against repercussions in the hydrocarbon world, for example, supply disruptions and price volatility. For the EU it seems crucial to continue with an integrated energy and climate policy, and the 'vision' of a more sustainable energy system beyond 2030 and continuing to 2050.

Geopolitical shifts are constraining Europe's manoeuvrability in the conventional energy domain, but provide an important push towards sustainability. This conjuncture reduces the trade-off between supply security and sustainability, and what remains is the economic dimension. Energy efficiency and decarbonisation (the third and fourth dimensions of the Energy Union framework) are important in this respect. If the EU wants to maintain and possibly improve competitiveness based on the five dimensions in the Energy Union, it has an interest to push a sustainable energy transition not only for climate reasons but also for technology and industrial policies. Here the Energy Union's fifth dimension—research and innovation—becomes especially relevant. In the shifting geopolitical and geo-economic environment, the EU's competitive position, economic growth and innovativeness depend on serious and concerted infrastructure investment in the energy realm.

Hesitating and sluggish efforts will possibly mean that China takes a leading role in innovative energy technologies (Slezak 2017). The uncertainties related to renewables lie in their production and geographical concentration. German companies were the first to move on wind and solar technologies (and somehow German consumers paid for the global learning curve), but the trade dispute with China settled in 2013 made it clear that the economic benefits (also) fall into the hands of imitators (Hughes and Meckling 2017). There are concerns that RES production will become dependent on China. This is due not only to the latter's state subsidies, which in fact benefit global consumers, and market dominance, but due to the concentration of natural resources necessary for the production of modern RES installations.

However unrealistic that might have sounded even 10 years back, China may become an important driver of global decarbonisation, while former environmental 'champions' like Australia and Japan have made a U-turn and expect to increase their CO_2 emissions and carbon intensity (e.g. Hua et al. 2016). Since 2013, Europe is no longer the major market

for renewables. The fact that the EU is losing out on that ground is bad news for its industrial and technology policy as well as its growth model building on innovation. As of 2016, China's installed wind capacity was 147 160 MW, with the United States coming in second (81 311 MW). In comparison, the EU's combined capacity was around 155 350 MW (with 45 639 in Germany) (IRENA 2017). China is also the global leader in solar PV with 77 433 GW (followed by Japan with 41 600 GW, Germany and the United States), as well as solar heating and geothermal heating (REN 21 2016). Finally, China is also emerging as a strategic investor into key infrastructure such as smart and super grids (Eid et al. 2017). With the June 2017 decision of the Donald Trump administration to withdraw the United States from the Paris Agreement, the EU and China are left as the main decarbonisation engines for the future. Even if that particular political move will most likely not have a deep impact on the American energy trajectory, which is largely shaped by state-level policies and private investment strategies already in place, it brings in enough uncertainty for the US renewable energy sector to allow Asian and European competitors to outpace it. The third decade of the twenty-first century will thus see Sino-European competition or cooperation—or most likely a mixture of both.

Another element adding to the growing divergence in global energy paths, but also to more uncertainty, is the future of nuclear energy. Only a decade ago, nuclear energy seemed to be among the most rational options for decarbonising the power sector and meeting the rising global energy demand at the same time. Some experts suggested a 'nuclear renaissance' was on the horizon (Ferguson 2009). The disaster at Fukushima Daiichi in March 2011, however, had a significant impact on the present and future of this sub-sector. First, the perceptions of risk and thus societal and political support for new nuclear plants have changed. Germany and initially Japan opted for a nuclear phase-out. In the May 2017 referendum, Swiss citizens also supported a gradual phase-out and transition based on renewables. Financial calculations, linked to nuclear safety and insurance, have changed as well. In 2008, the cost of a kilowatt of installed nuclear capacity was estimated at an already high $4 000 (Ferguson 2009, p. 304). The calculation of the costs of developing new units at Hinkley Point in the United Kingdom (UK) was set at € 5400

(over $7000) per kilowatt (Schneider and Froggatt 2012, p. 34). In 2016 the British government released a report suggesting that the lifetime cost of Hinkley Point C would be some 37 billion GBP.[1] To achieve satisfactory levels of safety, nuclear facilities are becoming extremely expensive to build. Last but not least, the 'end of commercial nuclear endeavours' is looming with Westinghouse bankruptcy and Areva's bailout, making nuclear power generation more and more a field of activity for state-led companies such as Rosatom of Russia (Mallet 2016; Hals 2017).

The implications for Europe are, again, uncertain. The internal division of perspectives on nuclear puts Germany on one side, and France, the UK as well as some Central-East European (CEE) countries on the opposite side. However, while in 2012 the eastern part of Europe seemed destined to a nuclear energy oversupply—with Belarus, Russia (Kaliningrad), Lithuania, Czech Republic, Hungary and Poland all boasting new nuclear projects, at the end of 2017 progress on these projects was limited.

2.3 Climate Change Mitigation, Energy Access and Changing Institutional Architecture

The 2015 Paris Agreement to the United Nations Framework Convention on Climate Change (UNFCCC) has established a new globally and legally binding climate regime from 2020 onwards. It confirmed the efforts to keep global warming at a level below 2° (compared to pre-industrial era), and the obligation by all parties—without division between developed and developing, but acknowledging 'differentiated responsibility'—to increase mitigation efforts. The nationally determined contributions (NDCs), which all parties are bound to come up with, will be subject to cyclical revision between the signatories (in a form of 'peer review'). Unlike the 1997 Kyoto Protocol, the Paris Agreement establishes a bottom-up mechanism in which a variety of efforts in different sectors are to be orchestrated in light of the common and universally recognised goal of mitigation, adaptation plus financial mechanisms (Dröge 2016).

The US administration under Donald Trump has taken a very different stance to climate change, and again, somewhat surprisingly perhaps, China appears as a major partner for the EU in climate change mitigation efforts. All in all, the Paris Agreement came as a relief for the European vision, as it gives a chance to work internationally on a reliable framework which the renewable energy industry needs.

However, with the world's population still growing rapidly, the 'energy dilemma' (Wilhite 2012, compare Bradshaw 2014) of fuelling economic development without increasing the already massive pressure on the planetary system is coming to the fore. Energy access and energy justice will become primary issues, given that the present system is already incredibly unjust (Goldthau and Sovacool 2012, p. 236; Sovacool and Dworkin 2015). Currently, 1.2 billion people have no access to electricity, while 2.7 billion lack access to modern, safe and clean cooking facilities. More than 90 per cent of the anticipated growth in demand in the next two decades will come from non-OECD countries. While modern energy services have a multiplier effect on other welfare sectors such as health or education (Florini and Sovacool 2011, p. 67), most developing countries lack the financial capacity to invest in such infrastructure and have to rely on the cheapest possible solutions.

Access to energy and development has become a new guiding paradigm. The United Nations' Sustainable Energy for All (SE4All) initiative, launched in 2011, has been reaffirmed in 2015 through the UN 2030 Agenda for Sustainable Development. The latter provides a revised list of 'Sustainable Development Goals', where Goal 7 is to 'ensure access to affordable, reliable, sustainable & modern energy for all' (SE4All 2017). The initiative aims at strengthening the paradigm of development. If the financial mechanisms provided under the Paris Agreement are synergised with the initiative, the expansion of renewables can be accelerated.

Meeting the growing global demand and modernising the ageing energy infrastructure will require investment counted in trillions of dollars. Due to path dependency and the current political economy of energy, national subsidies encourage the channelling of energy investments heavily in the direction of fossil fuels and nuclear rather than renewables (Florini and Sovacool 2011, p. 63). Subsidising renewables, which sees wide media criticism, and subsidising fossil fuels to a greater extent is rightly compared to

'running air-conditioning and heating at the same time' (Browne 2013). Low hydrocarbon prices unlock new emissions with new demand and may perpetuate fossil fuel consumption. At the same time, however, they provide an unprecedented opportunity to phase out fossil fuel subsidies.

The general trend is shaped by the growing divergence in energy paths chosen by the key powers as well as diverse level of ambitions to mitigate climate change. The energy mixes are becoming more heterogeneous. This may also result in a growing competition over winning economic models and a geopolitical rivalry in a multipolar world (Statoil 2016). To exploit economies of scale and markets of scope (as a precondition to decrease costs), the EU needs to push a global energy transition.

In those circumstances, we can expect a major shake-up of our governance system in the future. The role of established bodies of energy governance, such as the OPEC, can be ambiguous in the face of the need to decarbonise and the rise of unconventional fossil fuels. The current global energy governance landscape is described as a 'byzantine architecture of parallel, nested and overlapping institutions' (Van de Graaf 2013, p. 147), even 'littered with governors and institutions' (Dubash and Florini 2011, p. 6), but in face of the crisis of multilateralism and climate change scepticism, it seems unrealistic to achieve more coherency under a common roof. Moreover, we have seen significant steps forward in building in elements to support renewables (International Renewable Energy Agency—IRENA), to push for a sustainable energy evolution in developing countries (SE4All and SDGs) and to steer towards long-term decarbonisation, albeit at varying speeds (UNFCCC). The G20 has also enhanced their energy cooperation in different working groups (Roehrkasten et al. 2016; Roehrkasten and Westphal 2016).

3 Governance in an Energy Union: Internal Challenges

The bombshell experience of the Ukraine crisis on energy governance has surely had varying impact across the European Union. In fact, already existing cleavages in the interpretations of EU-Russia energy trade relations, especially in the gas sector (see Siddi, Chap. 10, in this volume),

were anything but erased overnight. Questions about the way forward remain, as do controversies over longer-term economic sanctions on Russia. These splits are additionally reinforced by internal EU divergences on climate ambitions, preferred energy pathways, and the tension between market and state-centric logics that we have seen already in the global overview. While the Commission has been very active in trying to flesh out the still rather basic setup of the internal energy market, unexpected political turns—most importantly Brexit—will certainly affect both the continued Europeanisation of energy policy, expansion of the internal market and the EU's climate ambitions.

The European Union is rooted in a regional cooperation with energy issues at its core. Initially coal, and later nuclear energy were the rationale for cooperation and integration at the community's very beginning. Given all this, it can be surprising to see how little progress has been made in the area of energy policy coordination over six decades. However, despite the uncertain global environment, recent years have seen unprecedented progress. The 2009 Third Energy Package with the target to finalise an internal energy market were historic steps (Schubert et al. 2016). The Energy Union, growing out of the shock after the annexation of Crimea and the outbreak of war in Eastern Ukraine, seems to be a much welcome framework for harmonising the mosaic of 28 energy and climate agendas of the Member States.

3.1 Energy: Our Common Goal, or Core State Power?

In the future, Europe will have a smaller share in the global market, which may translate to a quieter voice in international energy affairs. If it does not bundle forces in the changing landscape, it is hardly imaginable how it can shape rules and markets. A major paradox lies in the fact that while a common energy market and a European policy on energy, 'in a spirit of solidarity', are the envisaged goals of the EU, sovereignty over actual energy policies and mixes stays firmly in the hands of Member State governments. This significantly undermines the effectiveness and coherence of European energy policy and governance. The inherent tension in

Article 194 of the Treaty of Lisbon makes it clear that policy and governance coordination 'shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply' but calls, elsewhere, for solidarity and a common market.

With regard to the strategic energy triangle that guides energy policy action, it has become ever more evident since 2007 that shared values are lacking as a minimal common denominator. Member States prioritise the objectives of energy security, sustainability and economic efficiency quite differently and attach diverging urgency and immediacy to these targets—and so the broader European energy triangle is like a jigsaw puzzle composed of smaller Member State triangles that do not seem to fit together.

Wettestad et al. (2012) argued that what we have recently been observing in terms of the Commission's actions regarding emissions trading, renewable energy policy and the internal energy market is in fact a 'hesitant supranational turn', in which the EC promoted its position using other tactics and channels. The Renewable Energy Directives are an example of explicit work by the Commission in expanding its mandate to the energy sector. The 2020 Strategy as well as the 2030 Climate and Energy Framework used national and EU-wide targets as a governance instrument for increased harmonisation. The latter document also introduced the notion of a 'governance mechanism' for energy, which was later given more substance in the Energy Union framework (Szulecki et al. 2016). Last but not least, state aid guidelines—an instrument of competition regulation, which has been the Commission's domain for a longer time—has increasingly been used to drive and harmonise national energy policies by shaping renewable energy support schemes, capacity mechanisms and limiting fossil fuel subsidies.

Creating an internal energy market on a legal foundation marked by internal tension between solidarity and sovereignty is certainly a daunting task, involving 28 Member States grafting onto it 28 approaches, 28 renewable policies and soon perhaps 28 capacity market designs (Helm 2014). By 2017 that picture became even more complicated, as we cannot be sure when and on what conditions 28 become 27. The 'Brexit' process will surely have an impact on both the EU and UK energy policy in some way, but it is very difficult to anticipate how.

The stark divergence in climate policy ambitions is also playing into this fragmentation, and the roots of differing perspectives are not only material (resource endowments, economic constraints) but also ideational, ideological and rooted in political and organisational cultures (e.g. Szulecki 2017). This should not be seen as a one-sided issue, where 'green' states opt for harmony and carbon locked-in laggards act as veto players. Germany's *Energiewende*—the transition towards a renewable-based system—although laudable in its environmental aims, has been pointed out as a unilateral policy that created coordination problems for neighbouring countries. Poland and France were among the critics of the way the reforms were conducted—the speed and lack of consultation—while such deep changes in the German power system necessarily had an impact on the interconnected neighbourly grids. A radical policy aimed at increasing the sustainability of a system can suffer from a navel-gazing attitude, and energy transformation needs to be conducted at a transnational, Europe-wide scale. What adds to that is the fact that discussions about energy transitions and reforms have for more than five years and until recently concentrated on the electricity sector. Currently, more and more European countries are also developing policy frameworks for energy efficiency, decarbonisation of transport, household retrofitting and thermo-modernisation and so forth.

Division lines are still criss-crossing the Union. This is related to issues such as energy mixes and long-term energy strategies, sectorial policies, uncoordinated support mechanisms for different energy sources, market coupling models, utility ownership arrangements and so on. What adds to the state of EU energy and climate policy plagued by internal cleavages is the fact that spillovers from other policy fields such as foreign and security policy or economic and fiscal policy complicate the creation of an Energy Union even more (as the first part of this volume has attested, at least in relation to the securitisation of energy by framing it in terms of national security and foreign policy).

A division that is becoming more spelled out and important in its consequences lies between Member States that want to see more market-based approaches and those that try to safeguard energy policy as a core state power and unique state domain. This division has varying roots. An argument raised in support of market expansion is often based on

economic efficiency. As Europe reaches the end of a decade marked by economic strife, arguments about cutting costs and increasing the efficiency of investment through market mechanisms is resonating widely. At the same time, we are seeing an increasing revival of statist approaches where more power is concentrated in executives, and the public ownership of energy companies is perceived not merely as desirable but absolutely necessary for energy security. This is sometimes underpinned by a geopolitical gaze on energy politics.

One explanation of this can be found in Goldthau's (2012) distinction between energy 'marketers', treating energy as 'just another commodity', and energy 'securitisers' seeing it as an existential matter. The Lisbon Treaty of 2004 reflects a strong (neo)liberal market approach and the Commission as the guardian of the treaty has to stand by these principles. That leads to the impression that European institutions are dominated by marketers, while in contrast some Member States adopt a hard-nosed securitising stance. As we have seen also in Part 1 of this book and in the chapter by Kustova, this is an oversimplification. There is, however, no single best approach here. Moreover, Member States do not have to be consistent in their pro-market or pro-state regulation stance, which depends on various factors. This is even more evident when the urgency of an energy transition is prioritised, because markets most likely will not deliver, but require rather strong state-led policy elements. Germany—the top 'marketer', at least when gas or regional electricity trade is concerned—has been pushing for a very state-led model of renewable expansion, while Poland, the archetypical 'securitiser', uses market-based rhetoric in climate policy discussions. The area where all players seem to agree that regulation and state steering will be necessary is energy efficiency, continuously dragging behind renewable energy expansion, despite its obvious benefits.

The degree to which the EU is divided in the perception of Russia as a political partner, and the interdependence in energy trade as either a stranglehold or a lever, became more tangible than ever before in the face of the 2014 Ukrainian crisis (Westphal 2016).

2014 has had a cathartic effect because the EU has engaged in a 'stock-taking' and common modelling exercises with the stress test in natural gas supplies. Moreover, the creation of the Energy Union, the Energy

Security Package of 2015 and the Clean Energy Package of 2016 as well as, for example, generation adequacy assessment in the electricity sector are all directed towards enhancing cross-border and regional cooperation in the power and gas sector. In pushing the Energy Union, the Commission is stepping beyond the inertial status quo, enhancing the scale and scope of energy policies with a view on the future shape of the energy system (compare, however, important critical points, e.g. Fischer 2017).

The egocentric and statist orientation downplays solidarity and impedes Europeanisation as well as an energy transition. It is therefore not only an obstacle for internal energy governance but also makes policymakers blind to the scale and direction of global changes. As the global importance of Europe inevitably weakens, energy nationalism and Eurocentrism become graver sins, subverting the EU's and single Member State governments' response to new circumstances and global challenges.

3.2 Energy Security: A Key Rationale, Lately Highly Politically Charged

The EU is by far the largest importer of energy, buying nearly twice the volume of the US energy import and five times that of China. Import dependency is often perceived as the defining problem of European energy policy (Umbach 2010; Godzimirski and Nowak, Chap. 9, in this volume), at least in the old conventional energy world. Lilliestam and Patt (2012, p. 28), having analysed policy documents from the EU and two Member States, argue that two dimensions are crucial for energy security from a state-centric perspective: *availability* (having enough energy) and *reliability* (having it at all times and places).

This, however, does not seem to be a constructive definition. Energy security has to be defined in an encompassing way. An approach to focus on import dependency falls short because energy security also demands resilience in the system. Cherp and Jewell (2014), building their approach on the concept of vulnerability, also point our attention to the need of concentrating governance efforts on increasing the *resilience* of vital energy systems to long-term *stress* and abrupt *shocks*.

This approach expands the overwhelming focus on supply to all parts of the supply chain, making systemic robustness a fundamental policy issue. Diversification and possibilities for fuel switch, interconnections and reverse flows, but also security stocks, buffers and so on, are components of energy security. Landry (Chap. 11, in this volume) also criticises the long-standing EU approach for its narrow focus on *negative* security, while only including *positive* security logics recently.

Following Cherp and Jewell's approach, if the vulnerabilities of a particular energy system are difficult or impossible to eliminate and resilience cannot achieve the desired level, an alternative might be not to seek solutions within that system but replace it with an alternative system altogether. The overemphasis of import dependency from Russia and diversification of gas supplies has not only limited the discussion of resilience but more importantly perhaps of the diversification of energy *sources*. If the dependency on fossil fuels supplied by a single, powerful supplier turns out to be politically problematic, the alternative is to turn away from fossil fuels. This is also the approach that we have pointed to in the discussion of the global landscape as Europe's most constructive option for the future, bringing together (if governed well) all three tips of the energy triangle. In pushing for an accelerated energy transition, the EU has to reframe the issue of affordability, to see economic calculations not only in 'snap shot' mode but also as an investment into a sustainable energy future with, for example, low operation costs.

That said, system stability in the electricity sector is another focal point—also often underestimated in traditional energy security discussions. This has led to the argument that the expansion of renewable energy sources is happening too quickly (see Szulecki and Kusznir, Chap. 5, in this volume). Once again, these points are marked by an unconstructive fixation on the supply side and particularly frame renewable supply as the sole 'troublemaker'. In fact, the sluggish adaptation of transmission lines and distribution grids, lack of proper demand responses and conventional energy's low flexibility all contribute to that problem. Infrastructure and interconnections are key to increase flexibility and resilience (Puka and Szulecki 2014). The relationship between Germany and Poland in the energy sector is a great example of the way different

assumptions about and understandings of energy security can undermine cooperation (Gawlikowska-Fyk et al. 2017, see also the contributions by Heinrich and Lis, Chaps. 3 and 4, in this volume).

3.3 Energy Union: Finally Merging Security and Sustainability?

Climate protection is not the only rationale of the energy transition—energy security also has to be taken into account and seen as a justification (cf. Jewell et al. 2014). However, the way in which the EU has come to attach priority to a rather traditional understanding of energy security sits uneasily with its declared climate aims.

Environmental concerns have been an important part of the way energy policy was conceptualised by the Commission (Solorio Sandoval and Morata 2012). The Green Paper of 2006 mentions sustainability as an objective of an EU energy strategy, and this is the dimension in which the EU energy policies have had their particular strength (Westphal 2006, pp. 50–3). The EC's major success in both shaping European energy policies and steering them towards sustainability was undoubtedly the Climate and Energy Package (Helm 2014). It was essentially a set of short-term targets grounded on the assumption that fossil fuel prices would rise, making renewables more competitive and hence yielding competitive advantage to the EU, while the Emissions Trading System (ETS) was to become a model for a global emissions trading scheme (Pustelnik 2013). This strategy, given the assumptions and information that the EC had in hand at the time, was highly rational.

When oil prices were skyrocketing in 2008, and climate change was on the top of the agenda, the moment was perfect for launching a deep energy system transformation that should, like a proverbial silver bullet, solve all of the EU's problems at the same time: reduce energy costs in the long run, decrease import dependence and increase energy security and, last but not least, contribute to global (climate mitigation) and local (reduced pollution) environmental protection. The unforeseen external shifts—a global financial crisis and the US shale gas and oil bonanza—changed the entire policy context.

Faced with fossil energy prices 'low for longer', that strategy needs recalibrating. The expansion of renewables, which seems inevitable with the new climate regime in place and in the face of falling prices and increasing efficiency, will contribute to reducing the demand and with it the price for fossil fuels, making it again economically unsound to look for new hydrocarbon sources.

4 Conclusions

As the European Union enters its ninth consecutive year of internal crisis, the need for future projects and policy fields that may help to reinforce integration is greater than ever before. A sustainable Energy Union, merging the energy security agenda with climate policy and economic growth, seems promising in this respect.

Experience has shown that energy and climate policies are two sides of the same coin. In the EU, as Helm notes (2014, p. 33), the common energy market and climate policy were two separate pillars of energy policy, pursued by two different Directorates. An integrated climate and energy policy is a must, also because it is bringing in more stability to tackle the growing uncertainties (hence the importance of the post-2030 agenda till 2050). The EU has to constantly work on a common EU energy vision that translates in a roadmap till 2050. So far though, only Denmark, Germany and the UK have a clear strategy for sustainable energy transition until the mid-twenty-first century.

It is now a necessity under the Paris Agreement's framework to restore the EU's soft power, linking it to the Sustainable Development Goals agenda, and securing global leadership in sustainability transition. This model has the potential to generate slow but sustainable economic growth in the long term. But to achieve this, we have to overcome both internal divisions over climate ambitions, the growing market vs. state mismatch, and the fragmentation resulting from state-centric and egoistic understandings of sovereignty in the energy sector.

Until now, European states lack a shared vision regarding the future of energy policy. What seems even more important, though, is that EU Member States lack even a common understanding of their position in

the international energy landscape. There is a clear antagonism, a 'policy trap', between national and integrated energy governance. The only possibility to escape that tension is to rethink and emphasise the collective benefits of energy solidarity. Sovereignty should be seen as a collective good, not a national or private one; and states should be expected to exercise theirs in a way that is respectful of the sovereignty of others. To move forward, leaders, analysts and scholars need to 'dispel the prevalent notion that international cooperation necessarily means losing policymaking sovereignty and to make the case for more multilateralism, demonstrating that under conditions of policy interdependence more multilateralism helps states to regain and maintain their policymaking sovereignty' (Kaul 2013, p. 54).

The European perceptions or reimagination of energy security should reflect a systemic understanding, not focussed merely on supply, to navigate through the new energy landscape and deal with the risks, challenges and opportunities ahead (Scholl and Westphal 2017). Energy sustainability needs to be understood in holistic terms, where environmental goals bring significant economic and security co-benefits. The positive impact of renewable energy and energy efficiency on energy security should be continuously emphasised—as models show, a low-carbon transition can be beneficial in this respect (Jewell et al. 2014). Our system is not sustainable—not merely 'environmentally unfriendly'.

Decarbonisation and the energy transition have to be seen not just as a 'green' project but also a long-term strategy for inducing growth, increasing innovation, making Europe's vital energy systems more resilient and deepening integration by making Member States join forces in coordinating the shift. Integrating an ever-larger proportion of intermittent renewable energies requires not only a change on the generation side but presupposes a *systemic structural change*, ranging from generation to transmission, storage and demand. In that sense, it requires a grand transformation of the technical and the commercial side. This step is still ahead of the EU countries and part of the large debate on costs stems from this challenge. But it is also a question of the lens one looks through: the modernisation of infrastructure is in any case a growing need in most of the Member States.

The Energy Union—forging a crisis into an opportunity to finally shape the EU's energy policy in a coherent way—is also something beyond a chance for streamlining the economic side of energy with climate policy and security awareness. It provides a new impetus for integration, in an extraordinarily complicated supranational system, which originated from collaboration in the energy sector. Taking Tusk's initial idea and remodelling it, the Commission has laid ground for a new era in EU energy collaboration. Unfortunately, Brexit and important differences between important Member States can prove insurmountable. The already fragmented landscape can, in result, gain a functional representation in a (Energy) Union of different speeds. Differentiated integration is, whatever the political and normative judgements in that regard, already a fact (Leuffen et al. 2013).

The fundamental problem that prevails is the lack of a common energy vision. However, even if the Member States do not agree on the shape of the house the Commission foresees, they seem to be supportive of the general blueprint and basic architectural structure. The Energy Union framework with the in-built governance mechanism may well prove to be a tool to break out of the gridlock, helping to exploit functional effects and leading to more coherent policies.

Notes

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8

Unpacking the Nexus Between Market Liberalisation and Desecuritisation in Energy

Irina Kustova

1 Introduction

Energy has been recognised by International Relations (IR) scholarship as an increasingly salient factor affecting domestic policies and intergovernmental relations and an essential part of security concerns. It has been acknowledged that political interventions into the economy of resource exchange can generate energy security solutions that might trespass "normal" politics and require extraordinary security measures (the so-called process of "securitisation" seminally elaborated by the Copenhagen School and discussed in Chaps. 2 and 6). The literature has explored how energy relations and domestic political processes can be securitised, especially as a response to several energy crises in Europe

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throughout the 2000s (Natorski and Herranz Surrallés 2008; Judge and Maltby 2017; Stoddard 2012), but has left the analysis of energy desecuritisation to sporadic research inquiries (Christou and Adamides 2013).

Largely, debates about the conditions under which desecuritisation could occur have been developed in the context of broader IR energy studies in line with "Western-backed neoliberal orthodoxies" of "a generalisable paradigm heavily influenced by ideas about liberalisation, deregulation, and competition" (Kuzemko 2013, 1). These "pro-market orthodoxies" have implicitly expected desecuritisation of energy policies as an outcome of market reforms and, contrarily, securitisation of relations as a result of non-market policies, especially those of energy producers (Correlje and van der Linde 2006; Moran and Russell 2009; Goldthau 2012). Overall, these studies have viewed the "desecuritisation" of energy politics as an essentially rationalist-driven exercise where a choice of market reforms provides the necessary grounds for international cooperation and presupposes a non-securitised path of energy policies (Wilson 2015). To some extent, these ideas rely upon "the prevailing orthodoxy of economic liberalism in energy policy" (McGowan 2008, 91) which has been embraced by governments and international bodies since the late 1980s (e.g., Kessides 2004).

Indeed, open markets combined with rule-based market exchange may decrease the likelihood of politically grounded conflicts over resource exchange. However, this does not presuppose that market liberalisation and securitisation trends cannot occur simultaneously. Moreover, empirical examples, such as security concerns about the global oil market and the securitisation of the European Union's gas policies, seem not to juxtapose market reforms and securitisation trends in policies. These observations raise a need of a clearer definition of relations between liberalisation and securitisation. This chapter does not contrast liberalisation as part of market reforms to political aspects of energy relations, and does not view securitisation as part of political practices, as endorsed by many studies. On the contrary, this study argues that market liberalisation per se is neither a necessary nor a sufficient condition for the "normalisation" of energy politics.

This study also has a different understanding of energy commodification and liberalisation from the economic strand of the energy security

literature, which supposes that "energy markets were meant to depoliticize energy supply and thus make it less vulnerable to the types of politically motivated disruptions that shaped the earlier thinking on energy security" (Cherp and Jewell 2011, 205). In this regard, market liberalisation is understood in this study as a specific set of institutions which relies upon certain perceptions and ideas and promotes certain paradigms in its domestic ("domestic liberalisation") and international ("international liberalisation") dimensions. Thus, the domestic dimension refers to the market liberalisation of states' energy sectors, while the international one refers to the market liberalisation of international (global) and regional energy markets.

As market conditions and models would vary significantly, containing perceptions, ideas, practices, rules, and norms, this study suggests that linking a particular type of energy market governance ("market liberalisation") with (de)securitisation processes requires the analysis of case-specific conditions, which create the environment where tendencies for either securitisation or desecuritisation could prevail. In this research, these conditions are identified as (i) the compatibility of domestic institutional models of the energy sector, which refers to consensus regarding contractual forms, deliveries, and access to markets among actors, and (ii) the "non-strategic" socio-economic role of resources, which reflects actors' perceptions about the importance of a particular resource for states' economy, security, and policies. In short, the compatibility of domestic institutional models creates the environment for desecuritisation in the context of (regional) interactions and policy formation and perceptions about the "non-strategic role" of resources in the context of the desecuritisation of international governance patterns and policy formation.

These conditions allow for looking closer at combinations of the liberalisation and (de)securitisation processes (Fig. 8.1): (i) when the liberalisation of domestic energy sectors is accompanied by securitisation, (ii) when the liberalisation of domestic energy sectors is accompanied by desecuritisation, (iii) when the liberalisation of international (regional) energy markets is accompanied by securitisation, and (iv) when the liberalisation of international (regional) energy markets is accompanied by desecuritisation. The proposed conceptual framework is supported with

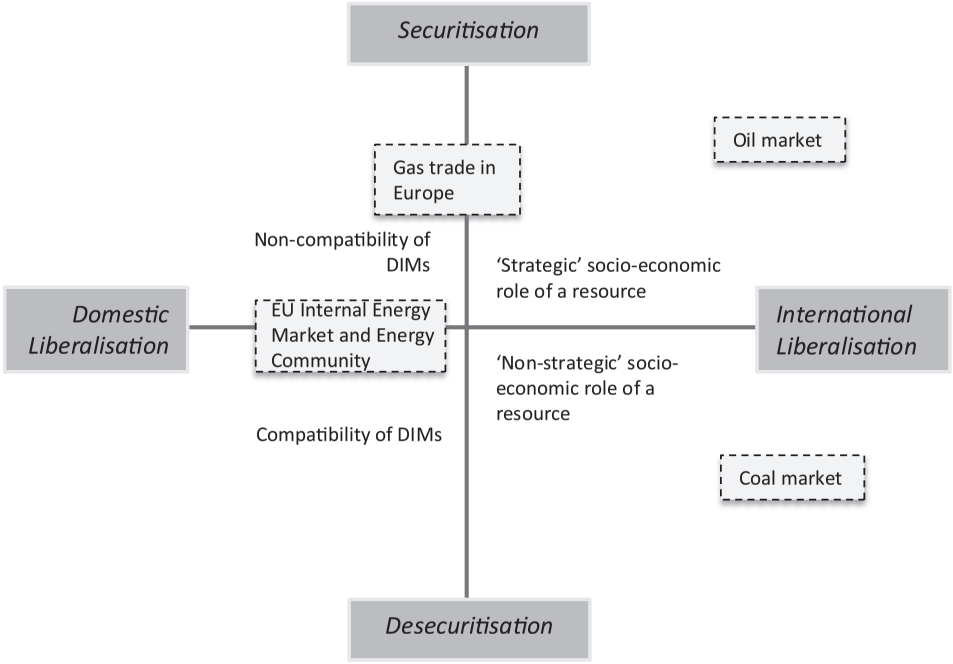

Fig. 8.1 Domestic/international liberalisation and (de)securitisation: a typology

several examples throughout the text, which demonstrate the intricacies of market reforms and desecuritisation processes in energy markets. It shows that, contrary to neoliberal expectations (Helm 2007; Goldthau and Sitter 2015, 23–26; Wilson 2015), additional conditions are more likely to generate further securitisation of energy issues in domestic and regional contexts.

In this way, this chapter aims at redefining a casual chain between liberalisation and desecuritisation. First, this chapter defines the concepts of liberalisation and securitisation and delineates their use in the current literature. Second, it establishes the conceptual links between them on the grounds of two factors introduced as omitted causal factors. This study advocates a need for a more thorough analysis of the scope conditions that might influence the desecuritisation pattern. It outlines causes affecting securitisation process regardless of the presence or absence of market reforms. The objective consists not in denying the possible impact of liberalisation but in providing a more comprehensive causal chain that frames energy policy analysis. It will result in a more methodologically robust definition of causes which takes a different path from economic determinism (including the views of one particular economic model leading to positive policy outcomes). Instead, the approach will contribute to securitisation theory by highlighting non-tangible causes of the complex social process.

2 Market Liberalisation and (De) securitisation: Delineating the Conceptual Boundaries

The major debate regarding the liberalisation of energy sectors has been whether energy policy should be an object of public policy deliberations, of extraordinary security measures, or of technocratic governance. While the reply would depend upon the paradigmatic stance one chooses, the recent literature has favoured the approach to depoliticisation as the reduction of the role of central/regional government in certain issue areas (Kuzemko 2015). This choice has been justified by a need for indepen-

dent, politics-free decision-making which relies upon a transfer of decision-making to independent agencies and removes the issue from political deliberations. That model includes national regulators, which are designed as agencies independent of ministries and (at least in theory) of direct governmental pressure, and transmission system operators (TSOs), which operate as market actors and in many countries are private, for-profit entities. It has been widely acknowledged that the liberalisation of the energy industry decreases the sector's politicisation—the separation of activities in the sector and independent regulation transform strategic assets subject to political deliberations into market-traded commodities. This also means that security choices are more likely to be made by market actors rather than by governments. A number of reforms have been endeavoured in the USA, the UK, and the EU across the sectors, including those of telecommunication, transport, and energy (Kuzemko 2013; Talus 2011).

Contrary to this, a rising "hunt for resources" and increasingly nationalist energy policies of producers have been often referred to as "politicisation", and its extreme form, securitisation, of energy relations (Goldthau and Sitter 2015). By this, politicisation has been often understood in energy-related studies as a process occurring in the situation of political conflicts and tensions over energy resources (Colgan 2013). Overall, there has remained a tension between the way International Relations and International Political Economy literature contrast "the usual economic activity" with "politics"—that is, everything that cannot be explained through usual market behaviour—where the latter also stands for securitisation (Moran 2009). In this regard, securitisation has been interpreted as a response to external shocks, producers' resource nationalism and consumers' domestic political concerns about security of supplies.

This study advocates a need for a more thorough analysis of the scope conditions that might influence (de)securitisation patterns and for establishing relations between the concepts. Showing that securitisation is possible in a liberalised context, it opens up rationalist neoliberal debates to discuss how liberalisation trends can become securitised due to states' perceptions of security threats. What this chapter seeks is to problematise what seems to be a dominant perception in the literature of a causal relationship

and to improve it by adding those missing scope conditions. It aims at establishing under what scope conditions (de)securitisation is likely to occur. A clearer typology of possible combinations provides for a better understanding of the interrelationship between liberalisation and (de)securitisation trends emerging in the current energy politics in various parts of the world.

2.1 The Domestic and International Dimensions of Market Liberalisation

Paradoxically, the domestic and international dimensions of market liberalisation have often been used interchangeably in the IR literature, referring to various combinations of regulation and market openness in international energy markets and domestic energy sectors. While they are mostly interrelated, one does not necessarily presuppose the other. Domestic market reforms refer to government-led organised reforms of the energy sector, its competition rules, and market access (Talus 2011), the international dimension is mostly concerned with the modes of governance that emerge in international markets as a result of various combinations of characteristics such as physical production, financial instruments, pricing mechanisms, and contract structures (Dannreuter 2015). In this regard, domestic organisation may define strategies and preferences for international markets, but this might not necessarily be the case.

Domestic Liberalisation

"Liberalisation of domestic energy sectors" refers to a combination of measures directed at the enhancement of competition in the sector (primarily through unbundling of operations and access to networks) and deregulation (inter alia by the allocation of authority to independent regulatory agencies), often accompanied with various degrees of privatisation (Jordana and Levi-Faur 2004). As has been conventionally argued by various international bodies (Müller-Jentsch 2001), these reforms allow market competition, provide incentives for the diversification of supplies and infrastructure development, and thus enhance energy secu-

rity (Kessides 2004). In a nutshell, market reforms are aimed at reorganising a *domestic institutional model* (DIM) of the energy sector, which has traditionally comprised restricted competition in the market of vertically-integrated companies. The DIM usually includes the following aspects (Rossiaud and Locatelli 2010, 10):

- access to the market (property rights to resources and their protection), investment protection, and investment dispute settlement;
- the organisational model (the level of state involvement and market freedoms, the role of state and private companies, and the access of foreign companies to upstream and downstream activities);
- competition rules (the level of competition in production, transmission, distribution, and export and the role of a regulator).

While the neoliberal literature would tend to view DIMs as a combination of rules and regulations that prescribe certain market behaviour and market operation, this study approaches DIMs from a more institutionalist point of view, viewing them as a set of rules and norms that guide interactions in energy markets and encompass a broader vision about underlying principles of the organisation of the energy sectors. The domestic institutional model is thus defined as a set of underlying principles of the organisation of energy sectors, identified by formal rules, organisational and regulatory frameworks, and informal rules and norms that provide the internal consistency of the model. In broader terms, a model reflects a paradigm or a set of ideas on the continuum between free markets and resource nationalism, which address the extent of state involvement (whether the state is an arbiter or a regulator) and the interplay between competition and regulation (whether a certain degree of competition is allowed and competition rules are indeed implemented and applied in practice).

Liberalisation of International (Regional) Energy Markets

The liberalisation of international or regional energy markets refers to the development of free, transparent, and rule-based markets. In such mar-

kets, contractual obligations are concluded at specific trading platforms and cover various time frameworks. Liberalisation of markets is usually referred to as global governance mechanisms, which are aimed at "foster[ing] efficient markets, deal with externalities (notably, but not only, climate change), extend access to energy services to the billions of people not adequately served by markets, and address the many trade-offs involved with improving energy security" (Florini and Sovacool 2011, 57). These global governance mechanisms aim at shaping transactions and interactions, leading to more predictable and transparent interactions in regard to investment agreements, trade rules, and transport regimes (Goldthau and Witte 2010). In other words, these structures are viewed as "a positive-sum market that merely needs better institutionalization to overcome the fundamental problem of energy security" (Florini and Sovacool 2011, 59). Some studies have been more sceptical about this politics-free nature of liberalisation (Belyi and Talus 2015; Dannreuter 2015) and view "international liberalisation" as a strategy to promote a certain vision of markets, which could contrast the existing governance practices.

2.2 Establishing Links Between the Liberalisation and (De)securitisation Processes: The Domestic Institutional Models and the Socio-Economic Role of Resources

This brief overview reveals that both liberalisation and securitisation can be grasped in multi-level dimensions. Then, an important question is addressed about how the two processes overlap. The present theoretical model inspired by the securitisation theory implies two core components foregrounding the causal chain—the compatibility of models and the social approach to the resources.

There are certain links between greater market freedoms and more peaceful rule-based relations, and this study seeks to unpack these causal mechanisms. The processes of (de)securitisation and market liberalisation can affect each other in both directions—for example, domestic liberalisation may lead to the desecuritisation of domestic energy policies, but

also the desecuritisation of political processes may invoke reforms. The proposed typology distinguishes four sets of relations between the processes which vary along (i) the type of market liberalisation, and (ii) the presence or absence of securitisation:

(i) Liberalisation of energy sectors ("domestic liberalisation") and desecuritisation;
(ii) Liberalisation of energy sectors ("domestic liberalisation") and securitisation;
(iii) Liberalisation of international (regional) energy markets ("international liberalisation") and securitisation;
(iv) Liberalisation of international (regional) energy markets ("international liberalisation") and desecuritisation.

Figure 8.1 illustrates this typology and provides examples for each set, which are elaborated below. In defining securitisation, this study refers to the methodological considerations identified in Chap. 6, thus not focusing on single security speech acts but including the analysis of contextual factors. It views extraordinary measures in line with the definitions in Chap. 2, which include "breaking norms that otherwise bind […], shifting competences and power (towards the executive) and withholding or limiting information", all legitimised by reference to security. This study introduces two factors that may intervene into this relationship in a non-linear, case-specific fashion: (i) the compatibility of DIMs and (ii) the socio-economic role of a resource. This analytical exercise by no means presupposes that causal links can be established; however, clarifying the complex relationship between liberalisation and (de)securitisation provides a clearer conceptual basis for future analysis.

Domestic Liberalisation and (De)securitisation: The Compatibility of Domestic Institutional Models

Domestic institutional models affect actors' strategies depending on their institutional interests. They contain both formal rules for the organisation of the sector but also a variety of perceptions about the role of the sector in the economy, the role of actors, goals, approaches to trade, and

strategies. Preferences might include, inter alia, ways to guarantee revenues, approaches to risk division, property and operating rights, and political and symbolic dominance. For example, revenues as economic benefits from cross-border trade can be secured by various mechanisms in commodity contracts, including flexibility of pricing and flexibility of volumes. Approaches to risk division define how risks between producers ("resource" risks of upstream activity, exploration of new fields and infrastructure) and consumers ("market" risks of downstream activity, marketing, and sales) are divided in commodity contracts (Konoplyanik 2009). These preferences may generate a variety of strategies about resource exchange and investment including the issues of: (i) types of commodity contracts (a commodity purchase or a long-term investment contract), (ii) access to infrastructure (mandatory or negotiated), and (iii) investment protection.

Once differences in these aspects penetrate energy relations, it might be argued that tensions are more prone to occur. Compatibility of models—a consensus about most of these issues—is likely to provide stability in the interactions, and contrarily, once (unilateral) changes in energy markets are invoked, they increase a probability of conflicts. Differences in domestic institutional models might increase disagreements and result in diversification policies, the absence of a common framework, and the prioritisation of physical aspects of energy security. In other words, liberalisation as a particular type of domestic institutional models is not a necessary and satisfactory factor of desecuritisation; instead, under certain conditions, it can generate further conflictual patterns in international practices.

Market reforms could occur simultaneously in the context of greater securitisation of policies and liberalisation may become a way to achieve securitisation, framed as a tool for enhancing resistance to (external) threats. Domestic market reforms do not always generate incentives for market openness in international relations. Certainly, at the regional level, or at a certain stage of market development, states may opt to adapt to a new regulatory paradigm due to a wide range of reasons (Prange-Gstöhl 2009), but it is questionable whether non-liberalised models a priori result in conflictual patterns.

An example includes gas trade between Europe and Russia that has become increasingly conflictual since the early 2000s—the period when

a number of reforms regarding further liberalisation of the EU gas market were adopted (Eikeland 2011) and when a number of initiatives confirmed stronger adherence to the state-controlled natural monopoly model in Russia.[1] These EU reforms have significantly changed three major aspects of the models—how the market is accessed, to guarantee investment protection and to settle disputes; how the market is organised; and the interplay between competition and regulation in the gas sector. These changes have triggered a number of uncertainties for both domestic and external stakeholders both in the EU and Russia. For example, unbundling measures introduced by the EU as part of the so-called Third Energy Package in 2009 have further complicated EU-Russia gas relations. These measures included the Third Country Clause, which was "referred to in the press as the 'Lex Gazprom'" (Boussena and Locatelli 2013, 32) and which was largely defined by Russian officials as hostile to Russia, and Russian Minister of Foreign Affairs Sergey Lavrov (2013, 8) pointed to "de facto expropriation of Russian companies".

While these reforms have been often referred to as a step towards the end of Russia's energy leverage in political gas pricing and as "normalisation" of the gas sector, they further fuelled tensions as a result of the implementation of EU regulation by the members of the EU Energy Community Treaty, in particular Ukraine. While the implementation of EU energy provisions by Ukraine would approximate its domestic model to the EU internal energy market, the broader system of energy governance demonstrates the significant incompatibility of the EU models with institutional practices of Russia. After the transit gas contract between Russia and Ukraine expires in 2019, these profound gas sector reforms in Ukraine will provide a new impetus for political deliberations in a broader gas market in Eurasia. Further advancement of the EU-led reform in Ukraine and other countries of the Energy Community will inevitably raise the issue of the co-existence of these models.

Liberalisation of International (Regional) Energy Markets and (De)securitisation: The Socio-Economic Role of Resources

One could expect that if resources are exchanged in free markets, desecuritisation of relations would occur. This postulate relies upon the strand

of the literature that views energy markets as those that "can deliver energy more efficiently and ensure necessary investment in energy infrastructure while the diversity of market actors would guarantee security of supply" (Cherp and Jewell 2011, 205). From one side, open markets provide flexibility and liquidity, and may potentially invoke domestic transformations in the country's sector as part of adaptations to the new market realities. For example, changes in contract practices in international energy markets facilitate changes of business practices and models (Rogers 2017). However, this does not presuppose desecuritisation. For example, notwithstanding the global and liberalised oil market, which can be only slightly distorted by non-market behaviour of market participants, oil is still widely considered a strategic commodity, and oil-related issues remain essentially a matter of securitisation by governments (Hughes and Long 2015).

Therefore, this study points to a need to consider the socio-economic role of the resource—that is, the importance attributed to a resource in the society, region, or the world. To some extent, this concept relies upon elaborations on "vital energy systems" by Cherp and Jewell—they view vital energy systems and their vulnerabilities not only as objective phenomena but "also political constructs defined and prioritized by various social actors" (2014, 419). This argument is consistent with the idea that the strategic nature—or "vitality"—of resources depends not only on objective factors such as trade liquidity, sector's transformations, and regional/world prices but also on a wide range of securitised path dependencies and persisting threat perceptions at domestic, regional, or global levels.

Accordingly, the level of international energy securitisation depends upon the considerations of states and market players about the role of a resource in their economies and politics. Economic developments, shifting market and industry structures, and changes in guiding paradigms can replace one resource with another as a strategic resource. In other words, it is not much about market structures (as the "liberalisation thesis" would argue) but about the degree of importance attributed by agency to this particular resource. This has occurred, for example, in the coal market, which nowadays plays only a marginal role in Europe both in economic and paradigmatic structures. Coal is no longer a crucial

source for economies, an instrument for financial policies, or a crucial source of revenues. This contrasts to gas markets which are currently undergoing liberalisation and internationalisation. Gas market liberalisation triggers a liquidity of gas trade and stimulates new market entry points in Europe. Yet, a process of desecuritisation did not occur in this issue-specific case. Indeed, gas is still perceived as a strategic commodity, which benchmarks the overall policies of the EU, Ukraine, and Russia. More particularly, in spite of current market reforms in line with EU energy regulation, a level of securitisation is observed since Ukrainian legislation opened a possibility to disrupt transit for security reasons. The Law "On Sanctions" adopted by the Ukrainian Parliament in 2014 allows Ukraine to apply 26 types of sanctions, including a complete or partial ban on transit of all kinds of resources (MENA Chamber 2014).

3 Conclusion

This chapter has not sought to challenge the argument that market reforms contribute to the stabilisation of resource exchange practices but aimed at scrutinising the interrelationship between the concepts of "(de) securitisation" and "market liberalisation", which has remained underelaborated in the IR literature. It has often been presupposed that the introduction of the elements of privatisation and commodification into energy sectors would change the logic of the market actors into a rationalist "Homo Economicus" in the way they should be expected to act as utility maximisers in a rational way. Contrarily, the absence of such reforms has been argued to invoke various political tensions and ineffective policies. This study has stressed there is a need to overcome this prevalent juxtaposition between market reforms and political deliberations about energy resources and has argued that market reforms are neither a necessary nor a sufficient factor for desecuritisation. In order to provide new insights into the relationship between the concepts, this study has complemented the existing rationalist-driven framework of energy deregulation and commodification with two context-dependent conditions grounded in the updated securitisation theory. A more robust methodological approach decouples liberalisation from policy outcomes and thus

distances itself from an economic determinism providing a foundation to more social causes to the process. Two subjective factors to be taken into account have comprised (i) the compatibility of institutional models of energy sectors and (ii) the socio-economic role of energy resources.

This analysis has helped to demonstrate that "domestic liberalisation" is not a silver bullet for desecuritisation of energy relations—empirical inquiries demonstrate that both market reforms and securitisation of energy policies can occur simultaneously. "Market liberalisation" as a form of the organisation of the energy sector may generate securitisation of relations and policies once it comes into conflict with the established modes of interactions regarding resource exchange among states. Moreover, liberalisation itself may become part of a securitisation discourse, as shown in the examples of an LNG terminal construction in Poland (Chap. 3, in this volume). Conversely, the absence of market reforms does not necessarily imply securitisation of energy politics, the argument to challenge studies about the increasingly bullying policies of energy producers. States with various forms of domestic energy sectors and export models have proved to have stable relations over decades once their domestic models were compatible.

The liberalisation of international markets is not also a necessary condition for the desecuritisation of domestic policies. Thus, the security of oil supplies has dominated the political deliberations of many states as part of their national security strategies. In other words, these policies do not depend much upon the types of markets these resources are exchanged in but upon the (perceived) role of these resources in the society and economy. In this regard, desecuritisation is more likely to occur once the socio-economic role of the resource is viewed as non-strategic by participants (compare Chap. 6). "A strategic view" does not exclude the objective importance of resources for societies (e.g., the share in the national energy mix), but draws attention to policy ideas that persist about this particular resource. The perceptions about resources may change in time along economic developments and policy changes.

In conclusion, by subjecting the concepts of liberalisation and desecuritisation to greater scrutiny, this chapter has demonstrated that no deterministic and linear relationship between the two exists. Instead, the relationship is contingent and contextual; liberalisation processes at either

domestic or international levels shape various interactions that may trigger desecuritisation depending on a particular context. In future research cases, beyond the present illustrative cases, scholars may need to take into account circumstance-based factors engendering either securitisation or desecuritisation.

Notes

1. For the history of cooperation between Europe and the USSR in the context of non-liberalised gas markets, see: Högselius, Per (2013). *Red Gas. Russia and the Origins of European Energy Dependence*: Palgrave Macmillan.

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9

EU Gas Supply Security: The Power of the Importer

Jakub M. Godzimirski and Zuzanna Nowak

1 Introduction

This chapter examines several aspects of European Union energy policy. First, we map EU gas relationships and attitudes towards its external gas suppliers in the broader context of the internal debate on increasing energy import dependence as a challenge to the security of supply. Second, we explore what energy policy instruments the Union has at its disposal in general and when related to external suppliers of gas. The sheer size of the market is the key strength of the EU's relations with external actors while its development of a set of well-functioning market tools and regulations adds what can be described as regulatory state power to this equation. Third, we examine how the use of various energy policy instruments and choice of priorities in energy policy can influence the future of the European gas market and impact on relations with its gas suppliers. In the

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fourth part, we narrow the geographical scope of this study to gas relations with Russia and Norway, the current main suppliers of gas who have the ambition to remain important players in the ongoing energy game. This choice is justified by the central position of these two on the gas market and their various ways of relating to the EU in formal and informal terms. Russia for obvious reasons is treated as a significant—some would even say, indispensable—energy partner, but also as a source of strategic concern. Norway, in turn, is viewed as a good commercial partner and a semi EU-insider because of its 'membership' of the European Economic Area (EEA). In the concluding part, we look at what the use of these policy instruments can reveal about the Union's strengths, weaknesses, opportunities, and threats as a gas importer and market regulator.

2 The EU as a Market for External Energy Suppliers

The European Union is not a single, collective purchaser of energy commodities. Energy supplies are delivered to concrete recipients in individual EU member states. However, general rules of the energy game are, at least in theory, the same on the whole territory of the Union and should apply to all EU Member States. Since 2004, the EU has had to import cumulatively over 50% of the energy it needs, mostly due to falling domestic production that was not outpaced by improved energy efficiency. In 2014, 53.5% of the EU-28's gross inland energy consumption—45.64% of solid fuels, 94.01% of crude oil and petroleum products, and 67.4% of natural gas—had to be imported. Since 2013, when Denmark's energy production dropped, all the Member States have been net importers of energy. The level of import dependence varies from almost 100% in the case of Malta to 8.9% in the case of Estonia. As a consequence, the EU is the most important importer of energy in the world (World Trade Organization WTO 2010), which makes access to its market an attractive option to all those who export energy commodities. The competition over supplies is harsh, but there is a relatively high level of concentration of supplies coming from a limited number of external suppliers. In 2014, 69.1% of gas imports and 43.5% of crude oil imports

came from the two top suppliers (Russia and Norway), while 70.7% of solid fuels—mostly various forms of coal—were supplied by Russia, Colombia, and the United States. Table 9.1 illustrates which countries were the most important external suppliers of energy to the EU in three categories of energy supplies in 2014.

At the same time, the EU's import dependence gives the external suppliers certain leverage in their relations with the Union. However, exporters of energy to the EU face several challenges related to Union energy policy. First, the consumption of energy in the EU is being decoupled from economic growth, so the EU market is not a growing market, even in a period of prosperity. Second, the question of the sustainability

Table 9.1 External suppliers of energy to the EU—shares of EU import in per cent (official EU data for 2014)

Country	Share of EU import of solid fuels	Share of EU import of crude oil	Share of EU import of natural gas
Algeria		4.2	12.3
Angola		3.3	
Australia	6.2		
Azerbaijan		4.4	
Canada	2.5		
Colombia	21.2		
Indonesia	3.4		
Iraq		4.6	
Kazakhstan		6.4	
Libya			2.1
Nigeria		9.1	1.5
Norway	0.7	13.1	31.6
Others	5.1	15.5	6.5
Peru			0.4
Qatar			6.9
Russia	29	30.4	37.5
Saudi Arabia		8.9	
South Africa	9.9		
Trinidad and Tobago			0.9
Turkey			0.2
Ukraine	1.5		
United States	20.5		

http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_production_and_imports, accessed 25 May 2017

of current and future energy supplies has made it to the top of the EU energy agenda, and there is a clear ambition on the part of the EU and its member states to reduce the share of fossil fuels in their energy mix as a way of mitigating the risk of climate change and at the same time reducing the level of energy import dependence. Third, external energy supplies are increasingly being viewed as not only an economic challenge but also a security risk that must be addressed. Fourth, the EU has developed a strong regulatory framework that all importers must bear in mind when deciding to export their energy commodities to this market.

3 EU Gas Needs and Import Dependence

At the strategic level, the EU seems to face today two key gas-related challenges. First, there is the question of the sustainability of gas as a source of energy in the context of the debate on climate change and the need to cut GHG emissions, which could be achieved only by reducing the role of fossil fuels in the energy mix. Although the Second Report on the State of the Energy Union concluded very optimistically that Europe's energy transition was well underway (European Commission 2017a, b), the EU 2016 Reference Scenario assessing the developments until 2050 presented a more realistic and challenging picture (European Commission 2016). EU domestic energy production, especially of fossil fuels, is expected to decline in this period; the gross inland energy consumption is to slightly decline from 1 666 601 ktoe in 2015 to 1 491 621 ktoe in 2050, but the import of gas is to increase from 269 292 ktoe in 2015 to 332 706 ktoe in 2050. The imbalance between the dynamics of EU gas production and gas consumption constitutes a serious, yet not unexpected, problem in terms of security of supply. As data presented in Table 9.2 show, this negative trend has been a characteristic feature of the EU gas market since at least 2000 when domestic production peaked. This gap is likely to widen. Due to the expected falling domestic production of gas, the level of gas import dependence is to increase from 69% in 2015 to 86% in 2050. Gas is also to remain an important source of energy in the EU energy mix—its share in the EU in 2015 was 23.2% while in 2050 it is to have a 25.3% share.

Table 9.2 EU gas production, consumption, and import—recent dynamics (European Commission 2016, p. 9)

EU-28, 2014	mtoe							Average annual growth rate	
	1990	1995	2000	2005	2010	2013	2014	90 > 14	05 > 14
Natural gas primary production	164.1	190.9	209.2	190.6	159.6	131.8	117.0	−1.40	−5.28
Gas gross inland consumption	298.2	336.1	396.2	445.2	447.3	387.3	342.9	+0.58	−2.86
Natural gas net imports	135.7	145.5	193.4	254.1	278.0	252.6	231.1	+2.24	−1.05

Hence, the second long-term strategic gas-related challenge—from where to import additional volumes of gas needed to fuel the EU economy? In 2014, import covered around two-thirds of the EU's gas needs and the bloc had to rely on a relatively small number of gas suppliers, as almost 70% of external gas supplies were coming from only two countries—Russia and Norway. Algeria accounted for only 12.3%, Qatar 6.9%, and Libya 2.1% of total EU gas imports in 2014. Although the EU aims at diversification of its gas supplies, for example, through the development of LNG trade, Russia and Norway, due to strong infrastructural ties, probably will remain the most dominant suppliers for decades to come.

Although in terms of negative environmental impact coal is the main challenge, the role of natural gas in the EU energy mix and in its strategic energy designs for the future is also disputed. This worries all EU external gas suppliers who have invested heavily in the infrastructure that links gas production sites with consumers and want thus to use it in the future. Some of them, like Gazprom with its Nord Stream 2, plan also to add new elements of the costly infrastructure to secure their access to the EU market and strengthen their position. Natural gas is often presented by its producers (and some consumers as well) to be the most attractive fossil fuel with a far lower environmental footprint than coal or oil (Magnus et al. 2016).

There are, however, several aspects of natural gas that may undermine its position on the European energy market. The high level of import

Table 9.3 External sources of gas supply to the EU between 2004 and 2014 (in per cent of import—EU official data)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Russia	43.6	40.7	39.3	38.7	37.6	33.1	32.1	34.9	34.9	41.2	37.5
Norway	24.3	23.8	25.9	28.1	28.4	29.4	27.5	27.3	31.2	30.0	31.6
Algeria	17.9	17.6	16.3	15.3	14.7	14.3	14.0	13.2	13.6	12.8	12.3
Qatar	1.4	1.5	1.8	2.2	2.3	5.5	9.7	11.8	8.5	6.6	6.9
Libya	0.4	1.6	2.5	3.0	2.9	2.9	2.7	0.7	1.9	1.7	2.1
Nigeria	3.6	3.4	4.3	4.6	4.0	2.4	4.1	4.4	3.6	1.8	1.5
Trinidad and Tobago	0.0	0.2	1.2	0.8	1.7	2.3	1.5	1.1	0.9	0.7	0.9
Peru	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.4
Turkey	0.0	0.0	0.0	0.0	0.1	2.0	0.2	0.2	0.2	0.2	0.2
Others	8.7	11.0	8.8	7.3	8.2	9.9	8.2	6.3	4.5	4.5	6.5

http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_production_and_imports, accessed 25 May 2017

dependence on Russia is viewed not only as an economic concern but also as a hard security challenge in a situation where it has questioned the very basic principles regulating cooperation in Europe by annexing Crimea and intervening in eastern Ukraine (Godzimirski 2015; Pirani et al. 2014; Stern et al. 2014). In addition, the issue of the environmental footprint of fossil fuels and global warming may undermine the position of natural gas in Europe. Russia and Norway may face greater competition for market shares from each other, greater competition from other suppliers of gas to Europe, including those supplying LNG, as well as growing competition from other more environmental-friendly sources of energy available locally, such as wind or solar (Table 9.3).

4 Instruments and Tools of EU External Energy and Gas Policy

Energy policy instruments are used to achieve energy policy goals set by a given actor in its interaction with other actors. They are used to influence the behaviour of other participants in the energy game by providing various incentives, promoting specific actions and approaches, or by de-incentivising other types of behaviour (Prontera 2009). They can thus be

described as either carrots or sticks or a combination of both approaches, depending on what goals are sought.

In his paper outlining various sides of energy policy and how energy policy interacts with other policies, Prontera (2009) listed a host of available policy instruments. The list included communicative instruments (negotiations, bargaining, the threat of sanctions, use of international organisations, persuasion, promotion of a rational and responsible use of energy), economic instruments (the promise or offer of rewards, taxation measures, financial incentives and subsidies, market liberalisation, and privatisation), as well as organisational instruments (creation of public firms and independent agencies, long-term planning, improvement of efficiency and energy savings).

Sathiendrakumar argued that energy policy instruments can be divided into two main categories, regulatory-legal and economic (Sathiendrakumar 2003), but for the purpose of this study, we find the categorisation of instruments proposed by Egmond et al. (2006)—who operated with four categories of energy policy instruments, namely, *legal-judicial*, *economic*, *communicative*, and *structural*—to be the most relevant.

Judicial and legal instruments prescribe the desired behaviour and set norms. Hence, as such, they influence the behaviour of actors by making them understand what is desired and accepted and what is not. If actors comply and play by the rules, they can expect rewards; if they don't, they should expect a kind of punishment or sanction. Economic instruments aim to influence financial considerations of actors, providing economic incentives to those who accommodate the interests of rule-setters and de-incentivising those who could oppose the realisation of various aspects of energy policies and plans. Communicative instruments transfer knowledge for the purpose of informing, persuading, convincing, or tempting. These instruments can also be combined with and support other instruments. They often create social support or opposition and increase awareness of the impact of implementation of various aspects of energy policies. Finally, infrastructural, physical instruments can be used to promote interests by, for instance, the construction of various elements of physical energy infrastructure or actions aimed at existing infrastructure to change its physical and market parameters and render it either useful or useless to other actors.

All the types of policy instruments listed above can be found in the EU energy policy toolbox (Andersen et al. 2015; Birchfield 2011; Birchfield and Duffield 2011; Kuzemko and Hadfield 2015; Matlary 1997). However, to understand how EU energy policy in general, and EU policy towards its external gas suppliers in particular, are put into practice, we need to get a better understanding of what the EU long-term energy policy goals are, how EU energy policy is 'organised' in institutional terms and how these goals would be achieved by translating ideas on energy policy into policy actions.

In the most general terms, EU energy goals boil down to three long-term objectives. Its energy policy aims to secure access to needed energy sources by promoting the security of energy supply, make energy supply and use sustainable, and secure the economic competitiveness of the EU economy in the global economic game (European Commission 2006, 2011).

How the EU is going to realise its energy policy goals depends also on how and by whom these energy policy goals are set and policies fulfilled. The EU is a very special political construction where policies are defined and implemented through a unique pattern of interactions between EU institutions and member states (Eberlein 2010; Eberlein and Kerwer 2004; Sabel and Zeitlin 2010). In the field of energy policy, the division of competences between the EU and member states is defined in Article 194 of the Treaty on The Functioning of the European Union. In broad lines, the EU is responsible for liberalisation and market creation, competition, construction of infrastructure, and the environmental aspects of energy policy, including energy efficiency and development of renewable energy sources, while member states are responsible for their energy security, energy mix, and development of various types of energy sources.

The actual implementation of energy policy therefore takes place in a very complex institutional landscape in which both EU institutions and national actors have a say (Eberlein 2008, 2010; Eberlein and Kerwer 2004). In addition, policy-related decisions are also directly and indirectly influenced by many actors with direct and indirect stakes in energy, such as non-EU governments, energy companies, NGOs, consumers, regional and local authorities, lobbyists, media, and so on, who use both formal and informal channels to influence the policymaking process (Godzimirski 2011; Nørgaard et al. 2014).

This raises several questions: How are these instruments and frameworks used, how are EU ideas about energy priorities translated into action, and what has been the EU practice when it comes to the EU's exertion of its market and regulatory power towards external gas suppliers?

The EU's power as gas importer is a result of the aggregation of its member states' interests and positions, the evolution of the institutional and regulatory setting, as well as external factors impacting suppliers' positions that the EU can use to its own advantage, factors that have played a part in defining its relations with external gas suppliers. These relations have been shaped by the EU decision on the creation of a single internal gas market as outlined in the three EU energy packages, three Gas Directives, and by the implementation of gas legislation at EU and national levels (Eikeland 2011; Romanova 2016; Yafimava 2013). Also, changing market conditions (Grigoriev et al. 2016; Kardaś 2014; Stern and Rogers 2014) with the emergence of new potential suppliers of gas, including suppliers of LNG (Molnar et al. 2015), and hopes for development of new gas resources in Europe in the wake of the US shale gas revolution (McGowan 2014; Szalai 2013) played a part in this process. The increased focus on sustainability of the energy system and the negative impact of fossil fuels on the global environment have been important factors influencing the situation of gas on the European market (Mathieu 2014; Youngs 2013). Because of the high level of import dependence, the state of political relations between the EU and countries supplying gas has both direct and indirect impacts on the situation on the European gas market. A quick glance at the list of key suppliers of gas to Europe reveals that, except for Norway and Trinidad and Tobago, this list is 'populated' by actors who do not necessarily share EU norms and values. Relations with these countries may therefore pose several challenges because an EU that represents liberal values has to relate to actors and gas suppliers operating in another normative universe (Godzimirski 2014b; Goldthau and Sitter 2015; Smith 2011). In addition, the EU regulations on competition and other aspects of energy policy have had an impact on the situation of external suppliers of gas on the European market.

In its whole history, the EU has faced several gas-related issues that have had to be addressed by the application of various policy instruments

and measures. The most important tool was the EU regulatory power based on the application of a set of legal-judicial instruments designed and implemented by the Union and member states (Andersen et al. 2015; Goldthau and Sitter 2015). The EU has also applied various types of economic instruments in its pursuit of policy goals by providing subsidies for some sorts of energy sources and punishing economically the use of other energy sources (Rashchupkina 2015). The EU has also used a whole host of communicative instruments to increase energy awareness among its citizens and other actors operating in the EU to persuade them to use available energy resources in a more rational and efficient way. The communicative instruments have also been widely used to present the EU energy policy goals to the outside world and to promote EU approaches to energy. Finally, the EU has also been using various infrastructural instruments to improve its energy security and resilience. A good example of the use of these types of instruments is the increased interconnectivity of the EU energy system, including gas infrastructure, which has made the whole system better prepared for unexpected disruptions in energy supplies and other possible problems both within the EU and in its energy relations with the world outside (European Commission 2015c; Glachant et al. 2013; Parmigiani 2013; Westphal 2014; Zachmann 2013). The EU's cooperation patterns with its two main suppliers, Russia and Norway, allow for an in-depth analysis of the EU's importer power and tools it uses to exert it.

5 Russia and Norway: Current and Future Gas Suppliers to the EU

Russia is the EU's most important partner, but also the most significant challenge in its gas policy. This results from numerous geopolitical conditions: Russia's tendency to manoeuvre on the boundary of established rules, different perspectives on common problems, as well as the unequal relationships the individual Member States and their gas companies have with Russia's Gazprom. On the other hand, Russia can also feel put to the test (and complains about it), as the EU is in reality formulating and exploring its own policy during interactions with this most challenging

partner. The same as their respective gas policies are constantly in the making, the bilateral EU-Russia relationship goes through ups and downs, slowly towards a predictable convergence.

Definitely, due to the geopolitical EU-Russia setting, the issue of the Union's dependence on gas import from Russia is high on the political agenda. Both are preoccupied with the issue of security—of supply for the EU and of demand for Russia. From this perspective, it has been of common interest to appease threats related to the transit of gas to the EU. The Russia-Ukraine gas conflicts in 2006 and 2009, as well as recently in 2014, made alarm bells ring in the EU. However, these alarms were heard by the Europeans only after the second conflict and truly woke up the Union only in 2014. Yet, while the EU was willing to respond to this problem in two ways, by implementing several measures to reduce its gas vulnerability vis-à-vis Russia and to be less exposed to possible transit-related problems (Godzimirski 2014a) while also supporting gas sector reforms in Ukraine, the Russians have been pushing for the total elimination of Ukrainian transit through bypass pipelines. In this context, some infrastructure projects to boost the development of the internal single gas market of the EU, especially numerous interconnectors on member states' borders, were implemented with financial and organisational support from the EU. It must be underlined, however, that even the Nord Stream pipeline, viewed as a strategic challenge by some new members (Godzimirski 2009) and aimed at ruling out Ukraine from the Russian gas business, was at that time labelled as a project that deserved EU political support.

Russia in its dealings with Ukraine has proved to be able to use energy as a tool to exert power and influence or even a direct threat. It is questionable, however, whether Gazprom would be able to use the same set of tools towards the EU. Numerous voices have underlined that Russia could not use its energy resources to inflict damage on the Union as Russia is also highly dependent on access to the European market (Godzimirski 2013; Godzimirski and Demakova 2012; Goldthau 2008; Orttung and Overland 2011). According to data provided by the Russian Central Bank (Central Bank of the Russian Federation 2017), between 2000 and 2015, Russia's earnings from export of crude oil, petroleum products and natural gas, representing 63.6% of Russia's export revenues

in this whole period, amounted to a rather impressive sum of 3 209 million USD. Overall, 91.1% of the value of Russian oil export and 93% of the value of the export of petroleum products came from trade with non-CIS countries. In addition, 73% of the volume of Russian gas export went to non-CIS customers, and sale of gas to those customers is the most important source of revenue to Gazprom, the Russian piped gas export monopolist. EU member states were the most important destination for export from Russia in general and for Russian export of energy commodities in particular. In his recently published detailed study on the Russian gas sector, Kardaś presented data on the growing importance of the EU as an importer of gas from Russia (Kardaś 2017). His data show 55% of the volume of Russian gas export in 2011 went to the EU, and in 2016, mostly because of the dramatically falling export of gas to Ukraine, the share of the EU in the volume of Russian gas export increased to 72%. In 2016, five EU member states could be described as mega-importers of Russian gas, importing more than 10 bcm each. Germany imported an impressive 49.8 bcm, Italy 24.7 bcm, the UK 17.9 bcm, France 11.4 bcm, and Poland 11.1 bcm. Austria took in 6.1 bcm and Hungary 5.5 bcm, while export to other EU member states was less than 5 bcm. This list defines how Russia sees the strategic importance of its gas relations with member states and how member states depend on Russian supplies to meet their gas needs. The argument raised in 2014 by the Russians about Gazprom's possible pivot towards Asia and an increase in gas supplies to the East seems now of little relevance to the EU market. This Russian export diversification would not translate into gas resource scarcity for the EU market, as the two export directions take advantage of different, distant resource bases.

Nevertheless, Russia's actions in Ukraine, as well as attempts to use propagandist leverage on the EU, have challenged the whole set of rules regulating cooperation in various spheres of post-Cold War Europe. They have undermined trust in Russia as a strategic partner and reintroduced military power as an instrument in European politics and in relation to energy. This had a huge impact on the EU's thinking on energy security (Godzimirski 2014a), putting this question on top of the European energy agenda (Dreyer and Stang 2013, 2014). These strategic energy-related challenges have forced various bodies of the EU and the expert

communities to present assessments of how Europe could reduce its gas dependence on Russia (Peruzzi et al. 2014) and work out a set of documents aimed at assisting the EU in identifying and addressing crucial issues pertaining to European energy security (European Commission 2014b, c; Glachant 2015; Slingerland et al. 2015). The need to address questions related to energy security of supply was one of the key factors behind the recent establishment of the Energy Union, a new institutional framework that is to make EU energy policy more coherent and effective (Egenhofer et al. 2014; European Commission 2015b; Szulecki et al. 2016).

The EU has strengthened its stance over the years, underlining that the ability of a Russian gas supplier to generate revenues from trade with the EU will depend on its ability to adapt to changing market and regulatory conditions in Europe. Despite much turbulence in the EU-Russia relationship, it is possible to observe a number of EU achievements and, hence, Russia's forced adaptation to the EU regulatory framework.

First of all, as shown in the Commission's exercise of stress tests conducted in 2014 (European Commission 2014a) simulating Russian gas supply disruption scenarios, through a number of investments created with the use of EU funds (e.g., Projects of Common Interest, Baltic Energy Market Interconnection Plan, etc.), the Union has significantly increased its capacity to jointly respond to gas security threats. Liquidity of the gas market being one of the conditions for supply security, the EU has put a strong emphasis on the construction of new infrastructure such as LNG terminals and the densification of pipeline networks on its territory (European Commission 2015a). Flagship projects Lithuanian FSRU in Klaipėda and Polish LNG terminal in Świnoujście (both appearing on the PCI list) have proven to constitute an immediate remedy to overdependence on Russian piped gas supplies as a means of effective diversification and market game-changers (Godzimirski et al. 2015). Similarly, numerous interconnector projects, such as Poland-Lithuania or Poland-Slovakia, have allowed the most vulnerable countries to integrate better with the EU internal gas market (Černiuk 2016). Also important has been the effort to increase market flexibility through enhancement of reverse pipeline capacity, which has allowed Ukraine's European neighbours to pump gas eastwards and help it secure energy supplies. Among

the most debated projects in Central and Eastern Europe (CEE) is the so-called Baltic Pipe, a part of the broader Northern Gate project. The project itself has long been on the list of EU PCIs but only recently, in response to Russian-German plans to build Nord Stream 2, has gained momentum. By the time renegotiation of the long-term gas supply contract with Russia comes in 2022, Poland wants to have an ace up its sleeve. Baltic Pipe, delivering gas from the Norwegian shelf with a few bcm capacity, is considered a reliable alternative to Russian supplies, not only for Poland but also for the whole region. Worth underlining is that Norway, the main competitor with Russia on the EU market, is considering involvement in the project. First, it openly claims that it would be conditional upon an economic assessment stating clearly business benefits for itself. Second, due to the pipeline's relatively small capacity (especially in comparison with the 55 bcm Nord Stream 2), Norway probably does not see any threat of direct confrontation with Russia in the CEE region. Third, Russia has not yet presented any official views about this infrastructure and remains reluctant to make any moves.

Within its borders, the EU has also insisted on uniformity of rules, regulations, and habits linked to the gas industry, especially after the biggest enlargement in 2004. New member states, the most exposed to Russian gas jugglery due to historical and infrastructural ties, the existence of long-term contracts, strong dependency, and the dominant position of Gazprom, adhered to the European *acquis.* As a consequence, liberalisation of their gas markets has become a contribution to their increased security of gas supplies. With the constant development of EU energy and gas policies, this troubled region could see a protective regulatory umbrella being spread in a similar way as over the Western EU states. For instance, the question of compliance of Gazprom's South Stream pipeline with the Third Energy Package was one of the major reasons for participants to stop work on this project. Recently, in the name of transparency, the European Commission (EC) acquired the right to review intergovernmental gas agreements concluded with non-EU parties as a means of ensuring their compliance with EU law. In signing new agreements, this should help avoid numerous legal issues in relations with Gazprom, such as abuse of its dominant position, the partition of markets, as well as breaking antitrust rules in the CEE region. Facing the risk

of substantial fines (11 billion euro in the ongoing antitrust case), Gazprom openly questions the EC's proceedings but nonetheless is quietly adapting to the new EU market requirements (Romanova 2016). Russia is, for instance, diversifying its export portfolio with LNG or offering more gas at spot prices, as well as at auction (Grigoriev et al. 2016; Mitrova 2013).

In addition to the above-mentioned examples of regulatory powers influencing Russia's behaviour, the European Union has gained a better overview of all member state gas markets—although they are still not connected enough—as well as their dealings with external suppliers. Thanks to increased access to information, the Commission was able to put itself on a higher plane, caring, at least declaratively, for the good of all members. It is therefore closely following and participating as a side in a court battle between supporters and opponents of extended Gazprom access to the Opal pipeline (an extension of Nord Stream on German territory). This position, however, does not allow the Commission to satisfy all member states' interests nor to conduct a fully consistent policy. The Nord Stream 2 case especially shows certain shortcomings. On the one hand, Germany, backed by Gazprom and its major gas companies (some also partially owned by Gazprom or its subsidiaries), together with a number of other European gas companies, has tried to convince the Commission of the necessity of this project's implementation for the sake of supply security, using economic arguments. On the other hand, Poland, with neighbouring CEE states, has tried to demonstrate the exact opposite, namely the threat posed by Nord Stream 2, using more political arguments (Lang and Westphal 2017). The Commission in this crossfire is considering both sides' arguments and its own capacity to intervene. Seeing such indecision in the EU, Gazprom has not hesitated to pour oil on the flame, spreading information about the start or completion of the next, small stages of the project (Lissek 2016).

Marked by significant distrust, Gazprom's continuing race to find legal loopholes while the Commission patches them ad hoc, the influence of various players (states, companies, even individuals such as Gerhard Schroeder[1]), flipping business and political arguments, and simply the clash of different political and regulatory orders, this European-Russian relationship has developed beyond expectations over the last 50 years

through a set of new connections and deals, but has become strong enough so that both parties cannot imagine doing business without the other.

Norway, the second key supplier of gas to the EU, is also interested in retaining its position on the EU market. The Norwegian interest in 'defending' the role of gas on the EU market is due to the increasing role of gas in the country's energy exports. In 2002, gas represented only 24% of petroleum export from Norway, but in the first months of 2015, its share stood at 61% (Ytreberg 2014). Norwegian experts see, however, some challenges emerging in this important market, such as the falling demand for gas in Europe, especially in the power generation sector where gas is replaced by cheaper coal and the possible impact of the implementation of EU climate policy on the role of fossil fuels in the energy mix (Endresen and Ånestad 2013; Kaspersen 2014; Løvas 2015; Wærness 2014). However, according to the latest edition of Statoil's official assessment on the future of energy, gas does not look that gloomy: By 2040, the share of gas in the global energy mix will be the same or even slightly higher than in 2013 (Statoil 2016). The same assessment of the future of the global energy system estimates that the demand for gas in the European Organisation for Economic Co-operation and Development (OECD) area will be both in 2020 and in 2040 lower than in 2013, which will indeed cause some problems for current and future gas suppliers to Europe (ibid. p. 58). Today, almost 100% of Norwegian gas export reaches the EU market, and the country is highly dependent on revenues from this sector and trade (Godzimirski 2014c; OED 2016). Of Norwegian gas exported through the well-developed pipeline system, 42.3% reaches the EU market in Germany, though some of this gas is shipped further down the chain through German pipelines to other customers; 24.5% is exported directly to the UK; 15.1% to France; 12.3% to Belgium; 0.4% to Denmark; and the rest, 5.3%, is marketed as LNG. Between 2000 and 2015, Norway's export of gas and oil generated on average 510 billion NOK in revenue per year, or 8 164 billion NOK in total, and represented on average 47% of the country's export revenues. This clearly illustrates that Norway has a very strong economic incentive to remain one of the key external energy suppliers to the EU, which, according to most estimates, will have to

increase its energy imports due to falling domestic production (European Commission 2016).

The most important feature in the context of Norway's energy cooperation with the EU is that Norway has been a member of the EEA since 1994 and has been following, with some exceptions, all the rules, including on energy, set by the EU (Archer 2005; Austvik 2003; Austvik and Claes 2011; Claes and Eikeland 1999; UD 2012). This has over the last 25 years resulted in many decisions influencing the conduct of Norwegian energy policy, such as the organisation of the energy sector, the state's role in it, the disbanding of the centralised gas sales monopoly, Gassforhandlingsutvalget (GFU), licensing practices, non-discrimination against foreign companies, and the overall liberalisation of the regulatory regime. This is especially the case of GFU in which Norway in 2001 was forced by the EU to abandon a quasi-monopolist approach to the sale of gas to the EU market. That was a clear example of how EU energy and competition policies contributed to changing the national Norwegian framework. The GFU was established in 1986 to manage the sale of Norwegian gas to Europe in a situation when external gas sellers had to deal with a buyers' monopoly represented by several European transmission companies that used their dominant market power to 'dictate' the conditions of gas trade. The idea was to strengthen the position of Norwegian gas and secure better conditions for its deliveries to the European market by providing the Norwegian state with an instrument that would limit the role of non-Norwegian producers of gas who were also among its most important buyers represented in the monopoly. However, when Norway joined the EEA and the European gas market became liberalised in response to the quasi-monopolistic practices of key companies controlling domestic markets and transmission networks, Norwegian authorities were forced to accept the EU objections and reform the national framework for management of energy resources and trade by, among other things, abolishing the GFU in 2001 and establishing Gassco, Gassled, and Petoro (Austvik and Claes 2011; UD 2012, pp. 554–556).

The GFU case was a very good example of how, in response to the new emerging institutional and regulatory reality and to improve its ability to indirectly influence EU energy policy, Norway has had to adopt rules and

practices that were in line with EU formal requirements. Norway's adaptation to new regulations is a good example of the adoption of legal instruments by an actor that is interested in having access to the attractive market. But Norway responded also by applying other instruments: communicative, such as direct contacts with DG Energy, participation in working meetings in Brussels, organisation of Baltic-Nordic breakfast meetings before the councils to communicate Norway's interests, increasing the presence in Brussels by establishing governmental and non-governmental organisation representations in the EU to communicate their interests; structural, such as the construction of new elements of infrastructure facilitating new gas deliveries; and economic, such as incentives for European companies that operate on the Norwegian shelf (Austvik and Claes 2011; Puka et al. 2015).

A recently published study (Puka et al. 2015) argues that the EU and Norway have a common interest in maintaining stable trade and therefore see their energy cooperation as a win-win scenario. However, the price interests of these two actors do not overlap, as they approach the market from two different positions—one a seller and the other a buyer. In addition, the study argues, EU market regulations intend to optimise European economic developments and do not primarily support Norway's national economic interests. To achieve its economic and political goals in its dealings with this important external/internal supplier of gas to the EU, the Union exerts pressure in two ways on Norway. First, it develops rules influencing policies in the sphere of liberalisation, competition, and climate that Norway must follow as a member of the EEA framework. Second, the EU aims at the long-term transformation of the Union towards a low-carbon economy, and this may also create the risk of shrinking demand for Norwegian oil and gas. The latter issue is also directly connected with the impact of EU climate policy on the situation of all external suppliers of fossil fuels since the policy of energy transition aims at limiting the use, and thus the demand for, fossil fuels in Europe. In the case of Norway, which is obliged to follow EU regulations as a member of the EEA, the question of the application of binding environmental requirements on petroleum production and ETC schemes also has had an impact on the country's ability to pursue its national goals in energy policy.

Norway faces therefore a double challenge in its energy relations with the EU—how to best adapt to a changing EU regulatory framework and market conditions and how to make its fossil fuels relevant in a situation in which they are increasingly being viewed by the EU and other concerned actors as a challenge or problem rather than a long-term solution to the EU's energy problem.

There are, however, several factors that make Norway an important EU partner. First, contrary to Russia, which spends most of its revenues generated from the petroleum trade with the EU on many ambitious politically driven projects, such as the huge military modernisation programme launched in 2012 by the newly re-elected President Putin, Norway shares basic values with its European partners, plays by the rules set by the EU, and has followed the policy of setting aside most of its revenues in the Norwegian Pensions Fund Global, which makes the country an important investment player in Europe and globally (Sverdrup 2016). Second, Norway has some specific features that make it a highly attractive energy partner for the EU. The country has a unique energy mix dominated by hydropower, which could help stabilise a greener energy system in Europe (Gullberg 2013). Norwegian gas could also serve several purposes: help the EU stabilise its energy market (Schjøtt-Pedersen 2016) and reduce the dependence of some of the most exposed European gas customers on Russian gas supplies, which are also bound, in the opinion of some European politicians, to a relatively high level of political risk. Norway has already embarked on a cautious policy of market diversification and has started supplying gas to Lithuania and Ukraine. It is considering supplying gas to Poland and via Poland to other regional customers in Eastern Europe if the Baltic Pipe project is completed. Norway is also a NATO ally to all its major energy customers in Europe, which is important in a situation when energy and gas dependence on Russia is increasingly viewed by some of them not only as an energy security challenge but also increasingly as a 'hard' security issue to be viewed through the lens of state security and foreign policy (Sverdrup 2014). What may pose a challenge for Norway's continued role as an important external supplier of gas to the EU, however, is the expected fall in gas production with the depletion of Norwegian gas fields. According to Norway's own estimates, the production of gas is about to plateau and

may start declining in the coming decades just when the EU will need more gas from external suppliers to fill the growing gap between falling domestic production and its gas needs (European Commission 2016).

6 Conclusions, or How to Assess the EU's Ability to Influence External Gas Suppliers?

The European Union finds itself in an interesting position of a vulnerable norm-setter in whose hands, to a certain extent, lies the capacity to define whether its own features constitute an impediment or an advantage in dealings with external gas suppliers. In addition to this, the attitude of the supplier (aiming to reach a win-win situation, as in Norway's case, or a position of strength, as in Russia's) plays a role in determining the application of the EU's market and regulatory power.

The EU is the biggest importer (if the states are viewed collectively) of gas worldwide, and that makes it both strong and exposed in its relations with external suppliers of gas. Strong, because it is extremely appealing to external gas suppliers who, for geographical and infrastructural reasons, would have problems with supplying gas to other markets but have access in the EU to a market with a high level of predictability, secure environment, and willingness to pay an attractive price for the commodity. Hence, the EU's gas relationships with Russia and Norway throughout the years have been put, with mutual consent, on track of ever-stronger interdependency, where stepping back on one side would create in the short to medium term more damage to the gas trade balance in Europe than benefits for all parties concerned. Exposed, because external suppliers of gas are also aware that the EU would face huge problems with meeting its gas needs in case of a sudden rupture in gas relations with its current suppliers. The strong energy connection between consumers and suppliers can even create a situation in which suppliers may think that some of their actions challenging the existing order would be tolerated and go unpunished due to this strong energy interdependence (Busygina and Filippov 2013). The somehow external factor playing in favour of the

EU is the peaceful symbiosis of Statoil and Gazprom on the Union's market, since none of them is willing to compete aggressively with the other. However, if there is a gas supply disruption from one of these companies, be it for political or technical reasons, the other would eagerly and immediately substitute, at least partially, for the failing supplier, reducing the threat of gas scarcity on the EU market.

Similarly, the strength of the EU lies in the size of its market, common rules, and unity. Any breach in solidarity is considered by suppliers to be weakness and a potential flash point for abuse. While it is not surprising that the member states often diverge in their interests related to gas—all the more when taking into account, for instance, the large discrepancy in gas consumption patterns among them (five countries, Germany, Italy, France, UK, and Spain, account for over 70% of total gas imports in the EU, while 14 countries each account for 1% or less, with 0% for Malta and Cyprus)—the EU has yet to learn how to build an internal consensus over controversial issues, instead of airing its dirty linen in public. In reality, the EU's perseverance on common gas policy formulation and implementation is what defines the suppliers' room for manoeuvre. This is best illustrated by the Opal pipeline case. Its operating rules set by the Commission in 2009 and constantly questioned since then by Gazprom underwent a long process of revision supported by the German regulatory authority and that resulted in a new decision at the end of 2016. However, insufficient consultations with other member states, curious exemption solutions, and a number of other uncertainties alarmed some of the CEE countries, which brought the case to the European Court of Justice, which in turn ruled against the decision.

The multitude of interests of the member states, their gas companies, lobbies, and so on, as well as shared competences between member states and EU institutions, determine internally the democratic strength of any worked-out European consensus. However, when faced with a company with a focused position (such as Statoil, which follows a precise business model) or a state (such as Russia, often guided by geopolitical interests), this consensus and shared values prove to be out of touch with reality. Too often, the European Union opens only one compartment of its toolbox, choosing the right but not a comprehensive form of interaction with

the gas suppliers. That was long the case of the EU's legal-judicial approach towards Russia, deprived of a political (therefore communicative as well as structural) dimension. Only the announcement of the Energy Union concept in the name of ending 'Russia's energy stranglehold' on Europe (Tusk 2014) constituted the beginning of a new wide-ranging European energy policy. Three years later, the Energy Union rising like a phoenix from the ashes amidst fears of insecurity of gas supply constitutes still the greatest opportunity for European Union gas policy. Time will show whether this ambitious project will be up to the task of preparing the EU to not only respond properly and uniformly to all gas suppliers but also to take the initiative and become a proactive, decisive player.

Notes

1. Gerhard Schroeder served as Germany's Chancellor from 1998 to 2005. He joined the board of Gazprom immediately after he lost the election in 2005, becoming a lobbyist. He was also directly involved in the Nord Stream pipeline project as the head of the shareholders' committee of the company.

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10

Identities and Vulnerabilities: The Ukraine Crisis and the Securitisation of the EU-Russia Gas Trade

Marco Siddi

1 Introduction

Since the mid-2000s, the European Union (EU)-Russia gas trade has evolved from a factor driving détente and cooperation into one augmenting controversy and heightening threat perceptions within the EU. This is particularly remarkable if we bear in mind that gas trade between (Soviet) Russia and European countries has been taking place for nearly five decades, providing Moscow with a lucrative business and its European partners with much-needed energy to power their economies and societies. The Soviet Union started to export large quantities of gas (and oil) via pipeline in the 1960s, first to member states of the Comecon (the Soviet-led Council for Mutual Economic Assistance) in East-Central Europe and then to Western European countries, including members of NATO and the European Community (the predecessor of the EU). Against the background of détente in East-West relations in the late 1960s and early

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1970s, Italy, Austria, West Germany, Finland and France became key customers of Soviet fossil fuel exports.

In the tense context of the Cold War, energy trade was one of the very few drivers of continental integration; indeed, some commentators referred to it as the 'hidden integration of Cold War Europe' (Högselius 2013: 2). The East-West gas trade kept growing after the dismemberment of the Soviet Union. Russia inherited the role of Europe's main gas provider, as most existing extraction facilities and reserves were located on its territory. In 2014, Russia supplied 37.5% of the gas imported by the EU, as well as 30.4% of crude oil and 29% of solid fuels; it was thus the main external supplier of the EU for all of these fossil fuels.[1]

However, European institutional discourses have increasingly framed the gas trade with Russia as a security issue (Casier 2011: 538–40). Despite the rhetoric of 'interdependence' in the gas relationship with Russia, in the mid-2000s, EU official documents began to portray reliance on Russian gas as a security issue and stressed the need to diversify energy relations. The gas transit crises between Russia and Ukraine in 2006 and 2009, which led to temporary disruptions in the flow of Russian gas to Europe, accelerated the securitisation of European discourses. The EU enlargements of 2004 and 2007 contributed to this trend, as the new member states in East-Central Europe are more vulnerable to disruptions in gas supplies from Russia and, for historical reasons, are more suspicious of Moscow's policies.

Moreover, following the Russian-Georgian war of August 2008, analysts portrayed Brussels and Moscow as competitors for access to the gas resources of Central Asia (see for instance German 2009). In the EU, mistrust of Russia as an energy supplier reached a peak with the Ukraine crisis.[2] Although the flow of Russian gas through Ukraine never stopped during the crisis, the EU reformulated its energy security strategy in late 2014 and launched the Energy Union strategy in February 2015, both largely as a response to the mounting mistrust of Russia as an energy supplier. Even more than in the past, new infrastructural projects and business initiatives involving European companies and Gazprom—most notably the Nord Stream-2 project, a set of pipelines connecting Russia and Germany via the Baltic Sea[3]—have become the subject of tense intra-EU discussions (Fischer 2016).

The evolution of the EU-Russia gas trade from a driver of cooperation into a source of controversy seems to run counter to liberal arguments, widely entrenched in mainstream Western economic and political thought, according to which trade promotes international cooperation and has pacifying effects on international relations (Goldthau and Witte 2009; Kuzemko et al. 2015: 10–12). Other contributions to this volume have exposed the shortcomings of the liberal approach and challenged some of its main assumptions (see the chapter by Kustova (Chap. 8)). The following analysis explores and contrasts other theoretical approaches that appear better suited to explain the securitisation of EU discourses regarding gas trade with Russia.

Two different theory-driven explanations can be identified. The first, rooted in geopolitical realism, conceptualises energy as a strategic tool in the competition among great powers for political supremacy in the international arena—access to energy resources is thus seen as a zero-sum game among states (Kuzemko et al. 2015: 9–10; see also Klare 2009; Kropatcheva 2011). In this view, the EU's reliance on Russian gas is a source of weakness, as Russia will attempt to use its natural resources and the ensuing economic leverage to achieve its political goals. Accordingly, the EU's energy trade with Russia is seen as a security issue because it increases the Union's vulnerability.

The second explanation stems from social constructivist theory and focuses on identity-based threat perceptions. From a social constructivist perspective, the securitisation of European discourses concerning gas trade with Russia is due to the increasing perception of Russia as a threatening 'Other', rather than to material factors and vulnerabilities. For historical reasons, notably the long subjugation to Russian imperialism, the image of Russia as a threatening 'Other' is particularly strong in East-Central European national identities (cf. Neumann 1998). This explains why East-Central European EU members, such as Poland and the Baltic States, tend to securitise energy relations with Russia more than Western European countries (i.e. Germany, Italy, Austria). The latter are keener on doing business with Gazprom, a fact which has led to heated disagreements within the EU. A social constructivist analysis thus holds that differences of opinion stem from divergent constructions of Russia as a foreign policy actor (Ehin and Berg 2016; Siddi 2017).

While both the realist and the social constructivist approaches provide useful perspectives, this chapter evaluates which one best explains the securitisation of the EU's gas trade with Russia. The realist view postulates that securitisation stems from the EU's vulnerability in this relationship and thus from the existence of a material security threat to the EU. The pertinence of this claim is assessed according to four indicators, following Casier (2011): (1) EU's vulnerability to supply disruptions, (2) Russia's demand dependence, (3) dominance of the gas trade in the bilateral relationship and (4) the willingness of Russian leaders to use gas trade for political purposes.

For the realist explanation to hold, these indicators should reveal that the EU is indeed vulnerable and exposed to security threats. The realist explanation also falsifies the social constructivist approach, as it argues that threats and vulnerabilities are real, and not constructed. However, if the indicators show that there is weak or no evidence for the realist explanation, the constructivist theory is not falsified, and it thus can be argued that securitisation stems from socially constructed threats and identity-based narratives.

Besides offering insights into theoretical approaches to securitisation and EU-Russia energy relations, this research focus answers recent calls to explore 'to what extent the securitised [energy] policy issues actually represent a threat' and to provide 'a more critical assessment of perceived and real threats to EU energy security' (Kustova 2015: 291). Before pursuing this investigation, however, it is necessary to define the key analytical concepts used in this chapter.

2 Energy Security, Securitisation and Identities

Energy security is usually defined as the availability of sufficient energy supplies at affordable prices (cf. Yergin 2006: 70–1). This definition focuses on the security of supply and hence primarily reflects the perspective of importing countries and organisations, such as the EU. Exporting countries, such as Russia, view energy security more in terms of the security of demand, namely having stable access to profitable markets for

their energy sales. The concept of sustainability (using energy while limiting the negative effects on the environment) also influences conceptions of energy security (Kuzemko et al. 2015: 25–6).

In several EU countries and institutions, the increasing focus on the security of supply and perceptions of Russia as a threat, or at best an unreliable provider, has fuelled the securitisation of the gas trade. The term 'securitisation' has been discussed at length in scholarly works (cf. e.g. Balzacq 2010; Buzan et al. 1998; Wæver 1995). Here, it is defined as the discursive practice of characterising something—in this case, reliance on Russian gas—as a security threat and advocating emergency or swift policy counter-measures to confront the presumed threat, usually without heeding existing rules and procedures. European Council President Donald Tusk's call for an EU central gas purchasing authority in April 2014, with reference to the possible threat of a Russian cut-off of gas supplies to Europe, is paradigmatic of the securitising discourse (Tusk 2014). By calling for a centralised managing authority, Tusk's plea implied a departure from the legal acquis of the EU, which aims at liberalising the Union's gas market.

This chapter argues that discourses securitising gas trade with Russia in the EU are rooted in national identities and long-standing constructions of Russia. In other words, the construction of gas trade with Russia as threatening derives primarily from entrenched national perceptions of that country as a danger to security, rather than from a thorough assessment of actual risks. This, however, requires the definition of national identity, another complex and contested concept (cf. e.g. Johnston 1999; Lebow 2008; Malesevic 2011). In this analysis, national identity is conceptualised as a discursive construction that aims at strengthening the cohesiveness of a collective (usually the dominant ethnic group within a state) by emphasising a shared history, culture, values, language and attachment to a particular territory (cf. Miller 1997: 18, 22–7).[4] National identity operates as a cognitive device that provides a state with an understanding of other countries, their motives, interests, probable actions and attitudes. Moreover, it is a multifaceted and malleable construct, which evolves as a result of the contestation among different domestic agents and conceptualisations (Hopf 2002: 5; Siddi 2017: 15–40).

Most significantly, national identity tends to be constructed in relation to one or more significant 'Others', namely actors in the international environment that are perceived as different or antithetical to the nation (or 'Self'). As a vast body of literature has shown, in many EU member states, national and European identities have been constructed or reinforced in opposition to the Russian 'Other' (see Morozov and Rumelilli 2012; Neumann 1998). Rivalry and conflicts with Russia have been so frequent and pervasive that they have become a defining trait of national identity discourses. Moscow's assertive stance in the last decade, particularly its annexation of Crimea and destabilisation of Eastern Ukraine, has revived and provided new material for European narratives portraying Russia as a threat. As will be argued in the latter part of this chapter, these narratives have had a profound impact on current political debates, including those concerning the gas relationship with Russia.

3 Is Russian Gas a Security Issue?

In order to assess the relevance of the realist interpretation, I will adopt four criteria which examine whether the EU-Russia gas trade indeed constitutes a security issue for the EU: the EU's supply vulnerability; asymmetrical trade interdependence, notably the absence of demand dependence for Russia; the importance of the gas trade in the broader hierarchy of bilateral issues in EU-Russia relations; and Russia's political will to make use of its gas exports to the EU for political purposes. These criteria were first formulated by Casier (2011), who applied them to the investigation of the potential security threat to the EU posed by its reliance on Russian fossil fuels.

The ensuing analysis updates Casier's research, which was carried out before the Ukraine crisis, and narrows it down to natural gas imports. Gas is more politically sensitive than oil in the EU-Russia energy relationship because gas markets, unlike oil markets, are only partially globalised. The intrinsic characteristics of gas make its transportation more difficult than that of oil. Hence, gas can be brought to Europe only via a limited number of routes, mostly pipelines from Russia, Norway and Algeria; the transport of liquefied natural gas (LNG) from more distant

areas of the world is increasing, but tends to be more expensive and requires additional infrastructure. For these reasons, Russia has, in principle, the option of using its gas exports to Europe as a lever for political purposes.

3.1 The EU's Supply Vulnerability

In the context of EU gas imports from Russia, vulnerability concerns the EU's exposure to high costs and shortages with far-reaching consequences should gas flows from Russia be disrupted. As Casier (2011: 541) points out, 'a country will only be vulnerable if it has no escape route, no alternatives on offer'. In 2015, EU-28 gas imports from Russia represented 40% of total gas imports, followed by Norway (37%), Algeria (7%) and LNG imports from other countries (13%, of which 90% came from Qatar, Algeria and Nigeria).[5] This data shows that Russia is indeed an essential gas supplier to the EU. However, the share of Russian gas in total EU imports has gone down by approximately 10% since the year 2000, despite the EU's Eastern enlargement of 2004–2007 and the consequent inclusion of countries that were relatively more dependent on Russian gas (as a total percentage of their gas imports).

In the last decade, the main interruptions of Russian gas flows to Europe were related to the issue of Ukrainian transit and Russian-Ukrainian conflicts; they took place in January 2006 and 2009 (Pirani et al. 2009). However, in the last five years, considerable flows of Russian gas were redirected from the Ukrainian transit system to the Nord Stream and Yamal (linking Russia and Poland via Belarus) pipelines. Following the opening of Nord Stream in 2011–2012, the percentage of Russian gas exports to the EU going through Ukraine has been halved—from around 80% to 39% in 2015.[6] Redirecting flows has thus decreased threats to the EU's security of supply, particularly in the light of the ongoing crisis in relations between Moscow and Kiev. Moreover, although 40% of EU-Russia gas trade still transits Ukraine, there have been no serious disruptions in gas flows during the current crisis. This highlights that, despite the very tense political situation, neither Moscow or Kiev

have opted to use the gas trade as an instrument of political influence vis-à-vis the EU.[7]

In the last few years, several other factors have dented Russia's capability to use gas as a weapon against the EU. These include the US shale gas revolution and the subsequent decrease in energy prices, the opening of new LNG import infrastructure in the EU (two LNG terminals became operational in Lithuania and Poland in 2015), the higher quantities of gas sold at spot prices and of LNG available in international markets, and increasing infrastructural interconnections among EU member states. Hence, if an assessment is based exclusively on the analysis of trends in gas markets and trade, it must be argued that the EU now faces far fewer risks to the security of its supplies from Russia than it did a few years ago. This suggests that the realist explanation does not hold: the increasing securitisation of discourses on the EU-Russia gas trade is not grounded in objective economic or data-based analysis, but rather in growing threat perceptions within the EU.

As will be argued in the latter part of this chapter, these perceptions are driven by Russia's increasingly assertive and revisionist foreign policy since the late 2000s, and especially after 2014. The new Russian foreign policy posture has reawakened negative constructions of the Russian 'Other' in national identities, most particularly in East-Central European countries that harbour historical grievances with Russia.[8] This has also led to the securitisation of European discourses on the gas trade, despite the fact that gas flows have continued largely unhindered and actual threats to them have diminished in the recent past. For instance, current Polish foreign minister Witold Waszczykowski described Russia as an 'existential threat' (cited in Die Welle 2016) and argued that Moscow could exploit the Nord Stream pipelines 'for blackmail at any time' (cited in France 24 2017).

A partial limitation to the social constructivist approach can be derived from a more specific analysis of energy dependence on Russia at the level of EU member states. East-Central European members are, on average, much more dependent on Russian gas than Central and Western European members (even though the latter import much more in total volumes) (Siddi 2016b: 134). While countries such as Germany and the Netherlands are well-interconnected with global gas markets, Poland and Slovakia are much

less so and rely heavily on Russian gas in sectors—such as heating—where it cannot easily be replaced. In past years, using its position as a monopolistic supplier in East-Central Europe, Gazprom has often charged higher prices for its gas than in Western Europe. Hence, a certain degree of vulnerability to Russian gas geopolitics does exist in the region. However, the construction of new infrastructure and interconnections is weakening Gazprom's monopolistic position. The vulnerability of East-Central Europe to Russian gas supplies has diminished in recent years and could be further reduced in the near future (cf. Dickel et al. 2014: 72). Therefore, even in this region, the increasing discursive securitisation of EU-Russia gas trade cannot easily be traced to a rise in actual threats to the security of supply.

3.2 Asymmetric Dependence?

The claim that Russia could interrupt gas supplies to the EU for political purposes presupposes that Moscow can sustain the losses from the forgone sales of gas at a level that would impact the EU's security of supply significantly. In other words, it assumes that the EU-Russia gas relationship is strongly asymmetric to the benefit of Russia. It has already been highlighted that, in the last few years, changing market conditions and additional infrastructure have reduced the EU's vulnerability to disruptions in Russian gas supplies. Russia's dependence on European gas demand and the indispensability of income from energy exports for the Russian federal budget strongly support the argument that the EU-Russia gas trade is not asymmetric to Russia's advantage and that Moscow would incur enormous losses in both the short and the long term if it were to stop supplies to the EU. By conceptualising energy as a mere strategic tool in inter-state power politics, the realist approach largely overlooks the domestic impact, technical issues and economic costs to Russia of a politically-motivated severance of supplies to Europe.

Fossil fuel exports constitute more than two thirds of Russia's total export revenues.[9] Although most of the income originates from oil sales, gas exports account for nearly 15% of total export revenues. This is not a negligible sum, particularly in the post-Ukraine crisis context, which has seen Russia mired in deep economic recession due to the combined effect

of low oil prices and EU sanctions. Renouncing the revenues from gas sales to the EU, by far Gazprom's main export market, would strain governmental resources enormously. The Russian government would deprive itself of the funds to provide basic services, pay pensions or the salaries of public employees. Such a move would have deep long-term consequences, as Russia would no longer be seen as a reliable supplier by its Western and, most importantly (in terms of purchased volumes), European customers. The latter would sue Gazprom for breaking supply contracts, demand large sums of money in compensation and seek new suppliers elsewhere.

Furthermore, Russia has no immediate alternatives to its European customers. Gazprom is seeking new partners in Asia, particularly China, but the endeavour has not produced the results that the company hoped for (Henderson and Mitrova 2015). New pipelines would be necessary to transport additional volumes of gas to China, which requires large investments. In turn, these are particularly difficult to make at a time of economic crisis and while Russian companies are banned from accessing Western funds due to the sanctions. Moreover, the gas fields that currently supply Europe are very distant from the Asian market. Redirecting Russia's gas exports eastwards would thus require either large infrastructural investments or the exploration and extraction of gas in new fields closer to Asian markets.

These considerations indicate that Russia cannot halt its gas sales to Europe—and redirect them elsewhere—without incurring major losses that would undermine its economy and threaten the stability of the country. Although many observers have convincingly argued that Russia is in a 'crisis mode' and subordinates economic interests to political ones (cf. e.g. Laine et al. 2015), stopping gas flows to Europe would ultimately have devastating consequences also at a political level, both domestically and internationally (where Russia would lose any credibility with its long-standing European partners). It is thus extremely unlikely that Russia will make large-scale use of its gas exports to achieve political goals in its relationship with the EU. This also undermines the realist argument about Russia's ability to use the 'energy weapon' in relations with the EU. In light of these considerations, the Russian 'energy weapon' seems more a social construction than a real and effective policy tool.

3.3 Gas Trade in the EU-Russia Relationship: How Significant?

The realist argument that Russia will use gas exports to split the EU and force it into concessions implies that the gas trade is a dominant aspect of the EU-Russia relationship. In fact, it is only one element in a much more complex scenario, and arguably not the most significant one. It has already been shown that, in terms of revenues, oil trade is more significant and does not easily lend itself to political uses. We have also seen that market developments in the last few years have diminished the strategic significance of Russian gas exports to the EU. By broadening our analysis to non-energy related factors of EU-Russia relations, the importance of the gas trade appears even more modest.

In economic terms, Russia is a much weaker power than the EU. The EU's gross domestic product (GDP) is nearly 15 times larger than that of Russia.[10] Within this picture, despite the economic importance of gas for the EU in sectors such as electricity generation and heating, gas trade is economically much more significant (as a share of total GDP) for Russia than for the EU. Hence, the incentives for Russia to escalate a trade war with the EU in the energy sector are virtually non-existent. Besides depriving state coffers of essential income, such a trade war would swiftly extend to other areas where Russia cannot compete with the EU. On a smaller scale, this has already become evident in the light of the EU sanctions and Russian counter-sanctions following the Ukraine crisis (Dreger et al. 2016): Russia is dependent on the import of a vast range of products from the West, access to Western capital markets, and Western investments and technology in numerous economic sectors, including the energy sector.

Furthermore, following the Ukraine crisis, the political dimension seems to have become the most significant aspect of the EU-Russia relationship. Economic confrontation has been limited to a set of areas that excludes the energy partnership. While energy trade has continued largely undisturbed, negotiations have focused primarily on political issues, such as the cessation of hostilities in Eastern Ukraine, constitutional reform in Ukraine and the future of its separatist regions. Developments in the international arena—most notably terrorism, the Syrian civil war and the

refugee crisis in Europe—are increasingly shifting the focus of EU-Russia relations towards political (rather than energy-related) issues. In some policy areas, Russia even seems to be seeking cooperation with the West, as shown by its calls to form an international anti-terrorist coalition with Western countries (see Sengupta and MacFarquhar 2015). Within this broader picture, the severing of Russian gas exports to Europe appears a highly unlikely scenario.

3.4 Russia's Willingness to Use Gas for Political Purposes

In the past decade, Russia has made use of its gas sales to gain political concessions in relations with members of the Commonwealth of Independent States—for instance, when it offered Ukraine a discount in gas prices in exchange for the extension of the lease of the naval base in Sevastopol in 2010 (Harding 2010). Gazprom also charged higher prices to some East-Central European EU member states, but it is disputable whether it did so for political purposes or simply in order to exploit its position as monopolistic supplier (and hence for purely economic goals) (cf. Siddi 2015: 8–9).

There is no conclusive evidence that Russia has made large-scale use of gas as a political weapon directly against the EU or individual member states (Stegen 2011; Yafimava 2015: 7–9), and it is highly unlikely that it will do so in the foreseeable future. Russia's strong need of revenues and foreign currency, low energy prices and the EU's increasing resilience to disruptions further increase the costs and diminish the effectiveness of such a move. The fact that Russia did not stop supplies to the EU even at the peak of the Ukraine crisis, and eventually resumed its gas exports to Ukraine in both the winters of 2014–2015 and 2015–2016, is emblematic of its willingness to leave energy trade out of the current confrontation with the EU.

Although Gazprom's new infrastructural project—Nord Stream-2—has a political dimension and has provoked acrimonious debates within the EU (see Fischer 2016), it will not change the current trends that have determined the EU's growing emancipation from Russian gas and will

not put Russia in a position to dictate political conditions to the EU by using the threat of a supply cut-off. In fact, it appears that Russian leaders are using new infrastructural projects as a form of soft power to improve relations with traditional Western and Southern European partners. By making its gas exports to the EU less dependent on Ukrainian transit, which proved problematic in the past, Russia may in fact end up depoliticising its gas trade with the EU (cf. Boersma 2015).

This section has shown that there is not sufficient evidence to demonstrate the existence of a threat to the EU's energy security stemming from the EU-Russia gas trade. This considerably undermines the realist approach, which would provide an apt framework to understand securitisation only if an objective security threat was actually present. The following sub-chapter shows how a social constructivist approach, based on identities and long-standing perceptions of Russia as Europe's 'Other', contributes to a better understanding of the securitisation of European discourses.

4 Identities and European Discourses on Russian Gas

As Neumann (1998: 67–112) has shown, numerous primary sources suggest that Russia has played the role of Europe's 'Other' for more than four centuries. Mainstream European narratives of Russia reveal a tendency to portray it as a liminal case of European identity. Russians were often described as barbarous and deficient in terms of civility, forms of government and religion (Poe 2003: 21). The first characterisations of Russia as 'the barbarian at the gates', a recurrent theme in European discourses, emerged in the descriptions of Russian soldiers during the Northern War against Sweden in the early eighteenth century. The theme was reiterated in mainstream narratives propagated by European cultural and political elites throughout the nineteenth and twentieth century (for more detailed analysis, see Neumann 1998; Siddi 2012).

During the Cold War, Western European discourses conceptualised Soviet Russia as a military and political threat (Neumann 1998: 99–100). This perception was substantiated by the presence of large Soviet conven-

tional and military forces in Central Europe. A distinct narrative was advocated by some prominent oppositional East-Central European intellectuals, such as Milan Kundera and Mihaly Vaida. This discourse constructed East-Central European countries within the Soviet bloc as 'Central Europe', part of European and Western civilisation, while it excluded the Soviet Union and its Russian core from this conception of European civilisation (cf. Szulecki 2015: 30). In the words of Milan Kundera, Soviet Russia was 'the radical negation of the modern West' and East-Central Europe had been 'kidnapped, displaced and brainwashed [by the] totalitarian Russian civilisation' (Kundera 1984). Although other East-Central European dissidents—such as Milan Simecka and Jaroslav Sabata—disagreed with this view, the idea of Russia being 'outside Europe' eventually prevailed in the geopolitical imaginaries of the dissidents who acquired leading political positions after the Cold War (cf. Szulecki 2015: 30, 34).

In the final years of the Cold War, in Western Europe, diminishing threat perceptions gradually left room for a more positive reassessment of Soviet foreign policy. The new Soviet leadership's discourse of a 'common European home' and its acceptance of the end of Eastern European regimes in 1989 and of German reunification were key components in this reassessment (cf. Herman 1996). Energy trade was largely seen as an economic driver of political rapprochement and continued to expand in the post-Cold War decades. However, perceptions of Russia remained more negative in East-Central European countries that had been part of the Soviet sphere of influence. Following the end of the pro-Soviet regimes in the region, a generation of politicians and members of civil society that had grown up in the milieus of the anti-Soviet underground came to power. Under the new political class, national identity was rebuilt in stark opposition to state socialism and the experience of domination by the Soviet Union. In their rhetoric, the accession of East-Central European countries to the European Union and NATO was portrayed as a 'return to Europe'—a process that involved the othering of Russia, which remained outside both organisations. Moreover, some East-Central European leaders continued to fear that Russia would pursue neo-imperial ambitions and abuse its energy resources for this purpose (cf. e.g. Kaczynski 2006).[11]

As post-Soviet Russia recovered economically thanks to high energy prices and adopted a more assertive foreign policy under Vladimir Putin, threat perceptions gained momentum in East-Central Europe. This was most notable in countries—such as Poland and the Baltic States—where identity-based distrust of Russia was particularly strong (Ehin and Berg 2016; see also Zarycki 2004). The strategic significance of Russia's gas exports, as well as the energy dependence of East-Central European states, made gas trade an important part of the ensuing political contestation. Politicians in Poland and the Baltic States were particularly fearful of energy cooperation between Germany and Russia, which in their view was reminiscent of the German-Soviet rapprochement that led to the partitioning of East-Central Europe in the late 1930s and 1940s. Most notably, at a conference held in Brussels in May 2006, Polish defence minister Radosław Sikorski compared the Nord Stream pipeline to a 'new Molotov-Ribbentrop pact' (cit. in Castle 2006). In the mid-2000s, the Polish political elite conceptualised dependence on Russian energy as a threat to their country's energy security and national sovereignty, thereby strongly securitising the issue (Godzimirski 2009: 193–196).

While the Nord Stream project allowed the redirection of gas flows, and potentially affected the income from transit fees for some East-Central European countries (see Godzimirski 2009: 192–3), it certainly did not signify a new German-Russian partitioning of Eastern Europe, as implied by Sikorski's statement of May 2006. It is also difficult to accept at face value the argument that risks to the security of gas supply were the main driving factor for opposition to the project in the Baltic States. In fact, Nord Stream did not substantially change their energy security, as pre-existing Russian export pipelines to Europe (Yamal and the Ukrainian network) already bypassed the Baltic region. Identity-based threat perceptions related to Russian policies and German-Russian cooperation, by contrast, offer a more convincing explanatory framework for Baltic opposition to the pipeline. As Jakub Godzimirski (2009: 198) argued, 'the opponents of the project [were] driven first and foremost by their fear of Russia, that has been their main and threatening constituting Other in both identity and energy security terms'. Russia's foreign policy agency since 2006–2007, including its energy disputes with Ukraine, further fuelled East-Central European fears.

In the tense context of the Ukraine crisis, the initiative of Gazprom and several Western European companies to double the capacity of Nord Stream has revived and strengthened such threat perceptions. In March 2016, eight East-Central European countries sent a letter to European Commission President Jean-Claude Juncker objecting to the expansion of the pipeline (Sytas 2016). Moreover, Russia's aggressive policies in Ukraine have fuelled opposition to Nord Stream-2 in Western Europe as well. Here, narratives of Russia as a security challenge—which had lost prominence after 1989—have returned to occupy an influential position in public discourses and among epistemic communities. Critical views are particularly dominant in EU institutions and Brussels-based think tanks, where Russia's policies towards Ukraine and its quest for cooperation with the German government over Nord Stream-2 are perceived as a direct challenge to the European integration project (cf. Fischer 2016).

However, Western European politicians tend to have a much less emphatic stance on the Nord Stream-2 issue. Several German leaders have declared themselves favourable to the project. During his tenure as German Minister for Economic Affairs and Energy, Sigmar Gabriel was arguably the most prominent of them. Chancellor Angela Merkel also tried to defend the pipeline by portraying it as a commercial initiative rather than a political one (cf. Siddi 2016a: 671–2). It might be tempting to conclude that this stance is motivated entirely by the economic and security benefits for Germany deriving from the pipeline. While these certainly help to understand the German position, its roots are much deeper and more complex. The cooperative stance vis-à-vis Russia known as *Ostpolitik*, which is based on trade and the energy partnership, has become ingrained in German foreign policy thinking over the past four decades. German leaders largely see it as a successful policy, which proved crucial to de-escalating tensions in Cold War Europe and eventually created the conditions for Germany's reunification. Hence, *Ostpolitik* is part of the country's foreign policy identity. This is particularly evident when politicians affiliated to the party that first crafted it, the German Social Democratic Party, are in charge of the foreign ministry, which has been the case from 2005 to 2009 and from 2013 to 2017 (Bagger 2016).

5 Conclusion: An Identity-Based Explanation to the Securitisation of EU-Russia Gas Trade

This chapter set out to explain the increasing securitisation of European discourses concerning gas trade with Russia. Dependence on Russian gas started to be constructed as a security issue in the 2000s and became central to European foreign policy debates following the Ukraine crisis in 2014. This discursive shift took place despite the fact that gas trade remained nearly unaffected by the crisis and the EU's dependence on Russian gas has decreased over time. The securitisation of EU-Russia gas trade thus poses a theoretical conundrum, as it appears to challenge dominant liberal arguments about the pacifying effects of trade on international relations.

In scholarly analyses, the most widespread reaction to this challenge consisted in the (re)assertion of geopolitical realist thinking, which conceptualises energy as a strategic tool in the competition among great powers within an anarchic international environment. Indeed, there are strong indications that confrontational and zero-sum thinking has become dominant in EU-Russia relations, particularly from the perspective of the Russian leadership (cf. Auer 2015). However, evidence that such reasoning has extended to the energy field is insufficient, as witnessed by the regular continuation of bilateral gas trade. Hence, this chapter has proposed a different explanation, based on perceptions, identities and a social constructivist analysis.

From this theoretical perspective, the securitisation of EU-Russia gas trade has been promoted primarily by the re-emergence of identity-based constructions of Russia as a threat and as Europe's 'Other', most notably in East-Central Europe. This process was fuelled by Russia's increasingly assertive posture in the 2000s and, most significantly, by its aggressive policies during the Ukraine crisis. Within this broader foreign policy framework, gas imports from Russia have been portrayed as a security issue, regardless of their actual significance for the EU's security of supply. As tensions related to the Ukraine crisis appear to be subsiding and are becoming overshadowed by other international issues, a split in intra-EU

discourses about energy cooperation with Russia has emerged—which sees East-Central European countries opposed to Germany and Western European nations that support energy trade with Moscow (Siddi 2016a).

While economic and energy security considerations are at the forefront of this contestation, identity-based and divergent perceptions of Russia as a foreign policy actor provide the conceptual framework against which the debate is taking place. Conceptualisations of Russia in national identities have remained dissonant across EU member states, a fact reflected in their differing stances vis-à-vis energy trade with Gazprom. Nevertheless, as argued, national identity is a fluid construct that evolves as a result of the contestation of different domestic discourses and in response to international developments (cf. Siddi 2017). Thus, it is possible that negative discourses on Russia may be displaced by more optimistic representations of the country, particularly if relations between Moscow and the West improve. Energy trade could play a role in this respect, and its continuation in spite of the tensions caused by the Ukraine crisis is a potent factor limiting the vicious circle of securitisation.

Notes

1. Eurostat, Main origin of primary energy imports, EU-28, 2004–14, http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_production_and_imports (accessed 27 March 2017).
2. Numerous different actors and stances co-exist and play a role in EU energy policy making. In this chapter, the term 'European Union' is used to refer both to the European Commission and the joint decision making of member states through the European Council.
3. Nord Stream-2 would double the capacity of the already existing Nord Stream gas pipelines from 55 to 100 billion cubic metres per year.
4. Other scholars, such as Brubaker and Cooper (2000), criticise reifying conceptualisations of identities and question the analytical usefulness of the concept.
5. Quarterly Report on European Gas Markets Market. Observatory for Energy, DG Energy, vol. 9, issue 1 (fourth quarter of 2015 and first quarter of 2016), pp. 10–12.
6. Ibid.

7. This was also possible thanks to the EU's mediation in resolving gas-related disputes between Russia and Ukraine in 2014 and 2015.
8. For instance, a survey conducted by the Pew Research Centre in the spring of 2016 found that 71% of Polish respondents viewed tensions with Russia as a threat; in most Western countries, between 30% and 40% of respondents shared this view. See http://www.pewglobal.org/2016/06/13/europeans-see-isis-climate-change-as-most-serious-threats/ (accessed 9 January 2017).
9. U.S. Energy Information Administration, U.S. Department of Energy, 23 July 2014, http://www.eia.gov/todayinenergy/detail.cfm?id=17231 (accessed 7 July 2016).
10. See International Monetary Fund, World Economic Outlook Database http://www.imf.org/external/pubs/ft/weo/2015/02/weodata/index.aspx (accessed 3 July 2016).
11. In the cited media interview from 2006, for instance, then Polish Prime Minister, Jaroslaw Kaczynski, stated that 'we [Poles] do not want to be afraid that, at some point, someone will shut off our [Poland's] supply [of gas]. The older and adult generations of Poles can still remember well that, 25 or 30 years ago, they were asking themselves the question: will the Russians invade us or not?'

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11

Positive and Negative Security: A Consequentialist Approach to EU Gas Supply

Paulina Landry

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Abbreviations

ACER	Agency for the Cooperation of Energy Regulators
CI	Critical Infrastructure
CMP	Congestion Management Procedure
CNG	Compressed Natural Gas
CSE	Central Stockholding Entity
DSO	Distribution System Operator
E&P	Exploration and Production
EP	Emergency Plan
EU	European Union
GDP	Gross Domestic Product
GIE	Gas Infrastructure Europe
GRI	Gas Regional Initiatives
GTL	Gas-To-Liquid
GWh/d	Gigawatt Hour per Day
IEA	International Energy Agency
IEM	Internal Energy Market
JPAP	Join Preventive Action Plan
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MS	Member State
MSD	Major Supply Disruptions
N-1	The N-1 Formula for Infrastructure Standard
NC BAL	Network Code on Gas Balancing of Transmission Networks
NC CAM	Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems
NC	Network Code
NRA	National Regulatory Authorities
PAP	Preventive Action Plan
PSO	Public Service Obligation
R&D	Research and Development
RA	Risk Assessment
REMIT	Regulation on Wholesale Market Integrity and Transparency
S&T	Scientific and Technical
SGI	Service of General Interest
SMEs	Small and Medium-Sized Enterprises

SS	Supply Standard
SSO	Storage System Operator
TOP	Take-or-Pay
TPA	Third Party Access
TSO	Transmission System Operator
VTP	Virtual Trading Point

1 Introduction

By promoting peace, its values and the well-being of its peoples, the EU functions as an anchor of stability for the European continent.[1] It attempts to create an area of freedom, security and justice for its citizens.[2] A stable and abundant supply of energy, therein gas supply, is imperative to achieve these goals.[3] In 2015, the gross inland consumption of natural gas in the EU-28 was estimated at around 16 649 thousand terajoules (EUROSTAT 2017a).[4] The biggest gas consumers (presented in descending order) were Germany, the United Kingdom, Italy, France, the Netherlands, Spain, Belgium and Poland (EUROSTAT 2017a).[5] EU Member States had a relatively high import dependency in gas, which varied from around 70% (Hungary 67.9%, Poland 72.2% and Austria 72.5%) up to 100% (Estonia), with the majority of countries falling into the 90% range (Belgium, Bulgaria, Czech Republic, Germany, Ireland, Greece, Spain, France, Italy, Latvia, Lithuania, Luxemburg, Portugal, Slovenia, Slovakia, Finland and Sweden). Only Denmark and the Netherlands had a negative gas dependency, while Cyprus and Malta experienced no gas dependency at all, since their domestic gas consumption was equal to zero. Romania, Croatia and the United Kingdom were also in good situations, where gas dependency totaled 1.8%, 27.1% and 41.8% respectively (EUROSTAT 2017c).[6]

Natural gas has a wide range of applications in the EU.[7] It is used in the sectors of transformation (to produce electricity and heat), energy (as fuel in electricity plants, combined heat and power plants, heat plants, gas works, coal mines, oil refineries, blast furnaces, coke ovens, etc.), transport (e.g. compressed natural gas in road vehicles or natural gas in pipeline transport and the distribution of diverse commodities such as water),

industry (iron and steel; chemical and petrochemical; non-ferrous metals; non-metallic minerals; transport equipment; machinery; mining and quarrying; food, beverages and tobacco; paper, pulp and printing; construction; wood and wood products; textile and leather), commercial and public services, residential consumption, agriculture and forestry and fishing (EUROSTAT, IEA, OECD, UNECE 2016).[8] As such, natural gas contributes to the production of numerous goods and to providing Europe with diverse services. In this regard, we can say that gas supply has a value that exceeds its price. This is a value of societal welfare and well-being that is a consequence of the effects that these produced goods and provided services have on the European population at large (Buchan and Keay 2015, 114).

Historically, the notion of gas security is affiliated with the concept of energy security that is a legacy of US President Ronald Reagan's term in office and his efforts to block development of the Yamal/Urengoi gas pipeline project in the mid-1980s (EIU 1983a: 1).[9] In 1982, Reagan put an embargo on the sale to the USSR of engineering parts produced under US licence by European companies that were necessary to build the Russian pipelines in Europe (EIU 1982a: 20). Americans regarded the massive expansion of Soviet-supplied gas pipelines as a threat and raised questions concerning freedom and independence of Western European countries in the face of the growing contractual dependency on gas supplies from Siberia (EIU 3 (1981): 3). For Europe, however, the situation appeared slightly different. Western European countries needed "all the gas they could get" (EIU 1982c: 1) since it reduced their dependence on OPEC (EIU 1982c: 5). They obtained it, at that time, from the USSR. As such, the Soviet gas helped to *secure* the European continent's gas supply (EIU 1982d:18). Both sides (Europe and Russia) had a common economic interest that could contribute to their respective growth and prosperity (EIU 1981a: 29). Reagan's embargo, which was enacted to obstruct Soviet-European cooperation (EIU 1982a: 20), was met with strong resistance from both European and Russian partners (EIU 1982b: 26). The USSR started producing their own 25 mw compressors to deliver the necessary parts to build the pipeline, while European companies producing US-licenced parts resisted by claiming that American law had no jurisdictional relevance in Europe (EIU 1982b: 27). As a result, the Yamal-Urengoi pipeline project attained symbolic importance: it became a matter

of national pride of the USSR (EIU 1982a: 20), and it also became a matter of exercising economic freedom in Europe (EIU 1982b: 27).

Just as the questions of gas security and freedom were pressing and intertwined in the 1980s, they are equally so dominating the EU energy security scene in the first decades of the twenty-first century. To a certain extent, the current debates echo that which the Americans feared 30 years ago. The concerns generated by the Russian-Ukrainian gas disputes (2005–2006, 2008–2009, 2013–2014), the Eastern Ukraine crisis (2014), the persistent vertical integration of gas undertakings in the downstream gas chain in Europe and the prevalent take-or-pay (TOP) gas agreements are all a burning source of an unease for the European policy-makers who wish to proceed in the liberal fashion and organise the gas markets in Europe accordingly.[10]

The EU energy policy is not a single policy, but one that consists of different Regulations, Directives and Recommendations (Eberlein 2005).[11] Since the year 2009, the EU policy on gas has experienced "a regulatory boom" that was reflected in the amount Regulations and Directives adopted, which resulted in a rapid development of common policy instruments. In this context, the most important were Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks, Regulation (EC) No 713/2009 establishing an Agency for the Cooperation of Energy Regulators (ACER), Regulation (EC) No 994/2010 concerning measures to safeguard security of gas supply, Regulation (EC) No 1227/2011 on the energy market integrity and transparency (REMIT) as well as Directive 2009/119/EC imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products and Directive 2009/73/EC concerning common rules for the internal market in natural gas.[12] Recently, the importance of the gas policy in Europe has become even more pronounced as the EU advances the Energy Union governance process and moves forward with a more complex strategy for energy security.[13]

Natural gas is one of the most important resources in the EU economy and a significant factor in the European energy security. In 2015, it provided 21% of the EU-28's primary energy.[14] Over the period of the last 25 years, European countries' gas dependency grew from 45.5% to 69.1%, and the prognosis is that this trend will likely continue.[15] The

emerging global gas market (Bielecki 2002; Weisser 2007) makes LNG trade and supply attractive to many countries, especially to those with sea access. Also, gas has been identified as the main alternative fuel with a potential for long-term oil substitution and decarbonisation, which strengthens its position on the energy market in Europe.[16] Finally, as recently as 2013 "an insufficient interconnection of wholesale gas markets led to a gross-welfare loss of approximately EUR 7 billion" (ACER/CEER 2013).[17] This is a loss that should and that can be avoided, and although it is a price being paid, it need not be.

It is therefore important to understand whether the EU gas policy's solutions suffice to secure the European continent's gas supply and, even more importantly, to comprehend what, where and how improvements can be made. By employing the analytical framework of negative and positive security, this chapter evaluates European gas policy in the context of its potential to maintain gas security in Europe. Gas security will be defined in terms of the delivery of a certain volume of gas that produces both economic value of societal well-being (produced goods and provided services) and a non-material value of freedom (which the delivery of these goods and services inspires) for EU citizens. Central to the proposed approach is an understanding of gas policy as having been created to provide a certain volume of gas and, by doing so, of maintaining and reinforcing the values of societal welfare and freedom. Negative gas security is the ability to *restore* required gas flows and, as such, to deliver *freedom from their loss*. Positive gas security entails innovatively managing these flows such that *freedom towards* acquiring the required volume of gas is strengthened. Negative gas security is negative only in the sense that it is the outcome of remedying a crisis situation where some threatening development is stopped and its negative consequences minimised so that the gas flow can be restored to pre-crisis levels. Positive security, which entails the creation of *added value*, allows for strengthening security itself. Positive security stimulates positive developments and maximises their good consequences: it signifies advancement and progress towards the required levels of gas supply. The negative and positive security can be regarded as fundamental building blocks of security strategy where security is perceived as a process of (re)producing certain values that are protected in the name of security.

By exploring the notion of the negative and positive security in EU gas policy, this chapter exposes a problem that the EU can have in delivering of gas security for its region. First, there would be a major difficulty in restoring lost welfare and confidence in freedom that would occur in the event of a major gas crisis and, as such, in delivering the negative gas security. The integration of national gas markets advances slowly and many projects are postponed. As a result, the levels of commercial and physical interconnectedness as well as procedural and technical interoperability in the EU gas system (which are required to activate the preventive and safeguard measures that inject the required gas flows in this system) are not met in several places.[18] Secondly, there is a problem in establishing freedom towards acquiring the needed gas flows and, as such, in delivering positive gas security. Here, the main line of criticism concerns the prevailing emphasis of the EU gas policy on a *technical* aspect of gas security (where gas security is perceived as resulting first and foremost from aggregated systemic technicalities in the EU gas system such as physical infrastructure, market rules, network codes, technical standards, etc.) while not adequately considering the role of the individual user of the gas system and that of the gas consumer in the creation of gas security in Europe. These issues (consumer's empowerment and end-user's energy efficiency and sustainable consumption patterns), if legally included in the EU gas policy and coupled with a functioning IEM for gas, can contribute to positive gas security in Europe. Here, added value enables energy consumers to exercise their liberty and tailor their energy security through their smart energy choices. This power affords them more welfare (since producing goods and services with energy-efficient solutions requires less energy) and freedom (since ability to act and enact gas security is brought closer to the consumer who becomes an active player instead of being a mere passive recipient of gas supply). Positive security is customised at the level of the individual in the local context, which stands in stark contrast to the solution proposed by the negative security model where gas security is perceived as a strategic choice of just a few high-level stakeholders at the national, regional and supranational levels. Both the negative and positive gas security models in the EU gas policy should be supported with the functioning and flexible IEM for gas that is critical to the European gas security. Effectively protecting Europe's gas flow today is not workable without a functional internal energy market for

gas that can provide infrastructural, procedural and technical solutions to the activation of such flows. Also, the interconnected and functional gas network where tradable and transitable gas capacity is exchanged on commercial basis is a prerequisite to the accommodation of empowered energy consumers in the EU gas system and sustainable end-users.

2 The Negative and Positive Security

To explore the EU gas security, this chapter incorporates concepts of negative and positive security from Security Studies and augments them with a conceptual tool consisting of negative and positive security models originating from the field of Computer Science. As Salter and Mutlu (2013) note, "critical security scholars are wanderers, not to say pirates. We travel into far away disciplines and bring back concepts, ideas and tools that we believe that explain the social and the political in reflexive ways" (Salter and Mutlu 2013, 353). In this case, travel into far off disciplines enabled researcher to establish a link between Security Studies, Political Science, Computer Sciences and Philosophy of Science. This connection created a new analytical focus that has turned towards *the (re) productive function*s of security processes. These processes were further considered against the delivery of certain values and classified as belonging to either the negative security model (if they performed a reproductive function and restored the required values) or to the positive security model (if they executed a productive function and created added value).

The concepts of the negative and positive security are commonly reflected in the ideas of "freedom from" and "freedom to" (Isaiah Berlin) where, in negative terms, "security is about the absence of something threatening" (Williams 2013, 7) and, in positive terms, security involves "phenomena that are enabling and make things possible" (Williams 2013, 7). Debates on negative and positive security are abundant in the field of Security Studies (Williams 2013; Floyd 2007; Roe 2012; Hoogensen Gjørv 2012). However, they focus on the separation of these two security types rather than on unifying them in an approach that discerns the dialectical nature of security where both the negative and positive security can be simultaneously present in security strategy.

Computer Science-based negative and positive security models apply two distinct authorisation rules for input validation to protect the system from danger. The positive security model allows for what is "known and accepted as good" by defining a set of inclusions, while the negative security model disallows for what is "known as bad" by defining a set of exclusions (Murphy and Salchow 2007). Pragmatic transposition of these authorisation rules into the framework of negative and positive security from Security Studies allows for delineating two basic functions of security strategy: the positive "enable" ("the known as good") and the negative "disable" ("the known as bad"). As such, the negative gas security model can be regarded as working for *freedom from* the loss of certain values (by eliminating threats and minimising their bad consequences) and the positive gas security model as working for *freedom towards* the required values (by stimulating good developments and maximising their good consequences). Negative security grounded in the epistemology of fear (McSweeney 1999), can be further associated with restoring required values. Positive security, on the other hand, built on an epistemology of enablement (McSweeney 1999) and equipollent to a capacity to provide a new quality and a strength, can be associated with a function of production of an added value. Further, these two security types are linked to a consequentialism grounded in Mead's symbolic interactionism and pragmatism of Ch. S. Peirce.[19] In consequentialism a signification of a concept is calculated to produce some effect that takes the form of a habit or concrete behaviour that is spatiotemporally bound (Lewis and Smith 1980, 57).[20] As such, all conceivable consequences (Lewis and Smith 1980, 55) of the conceptualisation of security in the analysed policy can be identified while, at the same time, they can be divided into two distinct groups: reproduction-related (effects that allow for restoring the required values) or production-related (effects that allow for the delivery of an added value to the delivery of the values protected in the name of security).[21]

In summary, it can be posited that the negative and positive security models can be regarded as fundamental building blocks of security strategy where security is perceived as *a process of a (re)production of certain values that are protected in the name of security.* This (re)production of values is embedded in a *spatiotemporal synthesis* of the negative and positive

Table 11.1 Negative and positive security

Negative security	Positive security
Freedom from loss of value(s)	*Freedom towards* acquiring value(s)
Restored status quo	Created *added value*
Reproductive function	Productive function

security. The negative security introduces an equilibrated notion of security: it is reactive and restores the existing status quo. It develops strategic systemic capabilities that allow for fighting threatening developments. The negative security is inevitably regressive since it is unable to foresee and remedy all the possible threats (given the spatiotemporal and not absolute nature of security) that can put at risk the values that we wish to protect. The positive model introduces a notion of security that focuses not as much on equilibrium and restoration (as the precedent negative model does) as on a production of an added value and a creation of a new quality to the values protected in the name of security (Table 11.1).

The proposed approach to security is somewhat unorthodox in the domain of energy security studies. Although a plethora of studies on energy security exist, the proposed interpretations are often attributive in that they feature the desired ideal security types as, for example, accessibility or availability of energy supply (APERC 2007; Cherp and Jewell 2014; Chester 2010; Helm 2002; Kruyt et al. 2009; Sovacool 2011; Weisser 2007; Winzer 2012). As such, they sort the various energy security types according to their qualities rather than their functions. Only few authors refer to energy security as a set of processes as, for example, Hughes's 4Rs—review, reduce, replace and restrict for energy security (Hughes 2009)—or Landry's (2015): coordinate, interconnect, interoperate, protect and moderate (establishment of freedom of gas flow) for the EU gas security.

3 The EU Strategy for Gas Security

In the study of the EU policy on gas (Landry 2015), it had been concluded that the EU perceived its gas security as a being generated via a dynamic interplay of five grand gas security processes: (1) *coordination* that advanced the communitarian *energy acquis*, generated legal

commitment to this acquis among Member States (MS) and extended this acquis beyond the EU borders to the closest neighbourhood and regions strategically important to the EU gas security; (2) *complex interconnectedness* of the intra-EU infrastructure and diversified external gas supply routes; (3) *complex interoperability*[22] that encompassed harmonisation of procedural and technical interoperability of the EU gas system through enhanced gas tradability (common gas trade rules) and transitability (common network codes) and an overall standardisation of gas standards (reference conditions and units, parameter ranges); (4) *protection of gas supply* through safeguard and preventive measures (market- or non-market-based depending on the crisis level); and (5) *moderation of gas demand* through reduction of gas consumption patterns with the help of rationalisation and modernisation measures (on both consumer's and producer's side) and through gas source replacement (e.g. alternative backup fuels) (see Fig. 11.1). These processes were further perceived as constituting the EU gas security strategy. This strategy was defined as generic for the Member States (MS) where MS were expected to work out their specific solutions within the framework of the Gas Regional Initiatives (GRI) process under the umbrella of the Agency for Cooperation of Energy Regulators (ACER). These solutions would be dependent on the MS gas supplies' vulnerabilities as defined by the real-

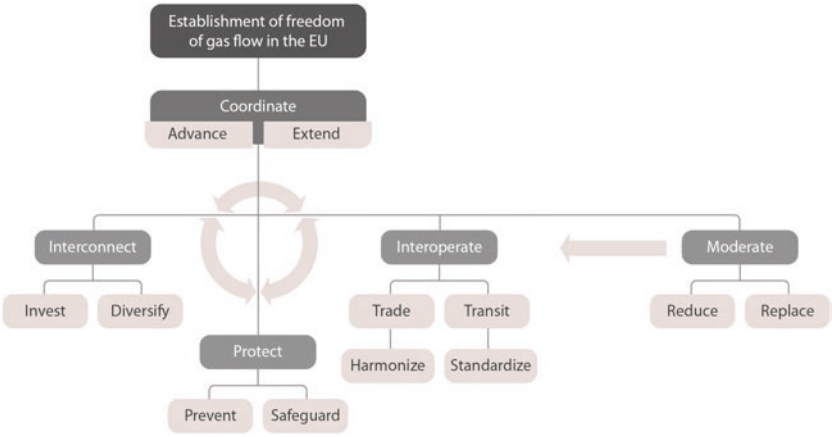

Fig. 11.1 The EU gas security strategy

ities of the Member States' energy markets: for example, the role gas plays in the energy mix, its gas market's size or its gas network configuration with regard to the existent level of interconnection, interoperability, storage and so on.

Yet, the mechanism of providing the strategic flows in the EU gas system is common for all MS. This mechanism is built upon a conception of a functional IEM for gas (with a complex interoperability at work and interconnectedness in place in this system) and a regional cohesion in a strategic decision-making. Even though some Member States will have their specific national/sub-regional solutions (e.g. particular interconnector, storage magazine, LNG terminal), they have rather limited options to invent a mechanism for the delivery of strategic gas flows other than the one discussed above.[23]

The establishment of a freedom of gas flow, represented by the accommodated and flexibly exchanged gas capacity in the EU gas system in a situation of gas crisis, was regarded as a symbolic representation of the entire strategy of the EU for gas security (Landry 2015). It had been further posited that at the heart of the EU strategy for gas security, there was the processual trio of *interconnectedness-interoperability-protection*. This trio, under the umbrella of a coordination process, worked to deliver the necessary infrastructural, procedural and functional conditions (integrated together in the Internal Energy Market for gas) to accommodation of the safeguard and preventive measures delivered by the protection process. The safeguard and preventive measures were explicitly designed to restore the lost gas flows in the situation of a gas crisis. The process of moderation was regarded as a supplementary to this trio as regards its technical feasibility and capacity of its reduction and replacement measures to cope with the gas crisis situations (see Fig. 11.1).[24]

4 Assets Ensuring Gas Security and the Value of Gas Security in Europe

Viewing security strategy (and its security processes) in terms of its impacts on assets that secure gas security and the way it may affect the values of security that these objects provide lies at the heart of the

proposed approach. By analysing these assets and the values that they represent, we can infer whether the given security strategy focuses on restoring and/or producing a given value. We can conclude whether this strategy works towards delivering a negative and/or a positive security.

Material gas security assets (infrastructure, network and devices) and non-material items (norms, procedures, knowledge and technology) (Burgess 2007) together help to provide sufficient conditions to accommodation of a certain gas volume in the EU gas system.[25] This gas volume permits (either directly or indirectly) the generation of certain levels of the Gross Domestic Product (GDP). The GDP is delivered in form of produced goods and services that account for the well-being of the EU citizens, shape the human condition of welfare in Europe and grant freedom to the EU citizens in a more general sense.

The EU strategy employs many physical objects and non-material items (such as norms and procedures) (Burgess 2007, 479) in the pursuit of gas security. Gas security objects include the Trans-European transmission and distribution gas networks and the intra-EU gas infrastructure, such as entry points, exit points, bi-directional physical interconnectors and interconnection points, underground storage facilities, LNG storage facilities, liquefaction plants, import terminals, reception, offloading and regasification facilities, decompression terminals, export terminals, infrastructural solutions supporting virtual trading points (VTP) and gas hubs.[26] There are also specialised devices and equipment that increase energy efficiency of gas consuming households, industry services, agricultural buildings and heating plants.[27]

The non-material items employed by the EU energy policy in the pursuit of gas security are "procedures, the knowledge-based principles of operation as well as the knowledge itself" (Burgess 2007, 479). They represent "the socially and culturally determined values, which precede, presuppose, surround and help to operate the heavy physical installations" (Burgess 2007, 479). In the EU gas security strategy, these norms and procedures are represented by the safeguard and preventive measures (as specified in the Gas Regulation No 994/2010), the standards that support these measures (such as the N-1 formula for Infrastructure Standard, Supply Standard) and other crisis management rules and procedures outlined in Risk Assessments (RA), Emergency Plans (EP), Prevention

Action Plans (PAPs) and Joint Preventive Action Plans (JPAPs).[28] Also, there are stockholding obligations and stockholding mechanism imposed on Member States and certain methods to calculate the commercial, emergency and special stocks.[29] Further, gas market operations have their own rules such as gas trade rules and gas transit network codes that belong to this group as well. Gas trade rules and procedures are encompassed in the energy packages (Directive 2009/73/EC, Directive 2003/55/EC and Directive 98/30/EC) and include rules of Third Party Access (TPA), ownership unbundling, authorisation procedure, designation and certification of Transmission System Operators (TSOs), designation of Storage System Operators (SSOs) and LNG System Operators (LNGs), independence of these system operators or certification in relation to third countries as well as rules for public service obligations and consumer protection.[30] These gas trade rules are further supported by the rules for wholesale energy market integrity and transparency (as outlined in the Regulation on wholesale energy market integrity and transparency, REMIT).[31] The EU Network Codes (as required by Regulation No 715/2009) are established by Commission Regulation—Network Code on Capacity Allocation (CAM), Network Conde on Gas Balancing of Transmission Networks and Network Code on Interoperability and Data Exchange Rules—and established by Commission Decision procedures on Congestion Management (CMP).[32] These procedures should not be regarded as merely technical solutions for gas transit or gas trade challenges in Europe but also as necessary building blocks in an establishment of gas security. Even though some of them may not be applied explicitly in crisis situations (due to some exemptions), they nevertheless contribute significantly to enablement of the strategic gas flow exchanges. They do so by encouraging the harmonisation of technical and operational standards of operation of the EU gas system (e.g. common standards and parameters of pressure, temperature, the Wobbe index, etc.) (ECBR 2014) and by prompting the adjacent TSOs and NRAs, DSOs or SSOs to cooperate.[33]

Yet, at the non-material level of gas security process are the knowledge and technology (Burgess 2007) that deliver a variety of energy-efficiency tools (e.g. modernisation, rationalisation and modification tools) to both gas consumers and gas producers.[34] Knowledge and technology make it

possible to outline criteria used to ensure the technical and environmental safety of the EU gas system and its performance and maintenance.[35] This includes, for example, minimum technical design, safety rules and operational requirements for connecting to the system of LNG facilities, storage facilities, other transmission or distribution systems and direct lines. Another example includes requirements for minimum energy performance for buildings or CO_2 performance standards for cars and vans. They all exemplify the role that science, technology and innovation together play in the process of the EU gas security.[36]

It can be further posited that at the socio-cultural level, the EU gas security strategy strives to reassure the EU citizens' confidence in freedom in a more general sense. By carrying out their respective subtasks, the socio-cultural norms and procedures reinforce the rules for transparency, non-discrimination of access, equality, elasticity and universality. They collectively contribute to establishment of freedom of movement of goods and services in the context of the EU gas market. For example, both the rule of Third Party Access (that attempts to deliver a common minimum set of third-party access services) and the rule of ownership unbundling (that contributes to the separation of networks from activities of production and supply) or the rule of TSOs' certification and designation (that attempts to establish independent TSOs and separate gas transmission from production and supply) support the concepts of a non-discriminatory operation of the EU gas network and functionality of the IEM for gas.[37] Similarly, the Public Service Obligations that work for "security of supply, regularity, quality and price of supplies" (EU, Directive 2009/73/EC) and "guarantee equality of access for natural gas undertakings of the Community to national consumers" (EU, Directive 2009/73/EC) or the safeguard and preventive measures that promote concepts of continuity and consumer protection are reinforcing some of the fundamental rights of the EU citizens, and, by doing so, they grant freedom to them in a more general sense.[38] Alike in the reinforcing fundamental rights are the rules for Critical Infrastructure that help to protect the EU citizens from suffering the consequences of disruptions in gas supply that could otherwise impair "their vital societal functions, health, safety, security, economic or social well-being" (EU, Directive 2008/114/EC) or the rules for Services of General Interest (SGI) that invoke the ideals of avail-

ability, quality, affordability of the supply services as well as the issues of end-users' protection.[39] Also, energy-efficiency solutions for gas consumers and gas producers, R&D policies, innovative exploration and production techniques (E&P) as well as scientific and technical (S&T) cooperation tools encourage freedom to acquire the necessary gas flows in the EU, and by doing so, they reassure the EU citizens' confidence in freedom that exceeds the mere context of gas security.

Consequently, gas security will be defined in terms of the delivery of a certain volume of gas that produces both economic value of welfare (understood in terms of an economic well-being of the EU citizens represented by the goods and services produced and delivered with help of the gas supply) and a non-material value of freedom (where freedom is understood in terms of the liberal freedoms that the European project of gas market integration fosters, conveys and reinforces, such as freedom of movement of goods and services, the notion of universality and continuity of services, transparency and the concept of non-discrimination, etc.).

5 The Negative Gas Security in the EU

All the processes associated with a function that "disallows for a loss of welfare and/or loss of confidence in freedom" and/or "reproduces welfare and/or restores confidence in freedom" are classified as working within the framework of the negative security. The negative gas security, by restoring the free circulation of gas flow, does not allow for the loss of production of certain goods and the loss of the delivery of certain services. As such, the negative security has a potential capacity to restore the existing welfare and confidence in freedom that the loss of these gas flows (either sudden in case of gas crisis or in the forecasted future) would cause otherwise.

If we look at Fig. 11.1 again, the negative security model penetrates all the recognised processes. The EU energy policy has largely focused on restoration of the required volume of gas: either in a short- to medium-term perspective (the protection and coordination processes) or in a long-term perspective (the processes of moderation, complex interconnectedness and complex interoperability).

In the EU strategy for gas security, *the processes of coordination*, *complex interconnectedness*, *complex interoperability*, *moderation* and *protection* are developed in response to some major threats identified for the EU gas security. The list of these threats presented here is non-exhaustive, but some of the major ones are present: dependency on an external gas supply (for the process of complex interconnectedness), dependency on the single largest gas supplier that dominates the downstream gas chain (for the complex interoperability process), energy nationalism (for the coordination process), scarcity of gas resources and climate change (for the moderation process) and dependency on a potentially unreliable transit zone (for the protection process) (for more detailed list, see Landry 2015). The processes deployed by the negative security model are developed to offset the negative consequences of these identified threats. Employed to restore the needed gas capacity in the EU gas system either in a short- to medium-term or long-term perspective, they stimulate the reproductive capacity of this system. The negative gas security model equips the policy-makers with a vocabulary consisting of Major Supply Disruptions (MSD) (outlined in Risk Assessments and defined in relation to minimum stockholding obligations), states of emergencies with different crisis levels (defined in Emergency Plans, EPs), and national and regional emergency levels (defined in Preventive Action Plans and Joint Preventive Action Plans) and adds Supply and Infrastructure Standards as tools to identify major threats and risks to the EU gas system. Further, the model recognises not only the notion of market manipulation but also attempts to manipulate the market, which is classified as an abusive practice on the wholesale gas market (as outlined by REMIT).[40] The list of these internal threats and risks is long, and it is outside of scope of this chapter to discuss them all. The purpose of mentioning them is just to show the mechanism of creation and development of this negative security model. Once the external threat and the threatening development that this threat causes internally in the system are identified, measures to diminish the negative consequences and offset the risk are established. For example, the protection process delivers short- to medium-term preventive and safeguard measures that inject the strategic flows at times and places where and when they are needed. The preventive measures that are market-based, and as such commercial and voluntary, can be applied on

(a) *supply-side*, for example, peak-shaving measures, commercial gas storage, LNG-terminal capacity, increased production and import flexibility, interconnection points, reverse flows and so on, or on (b) *demand-side*, for example, fuel switching, use of interruptible contracts, firm load shedding, increased efficiency and usage of renewable energy resources.[41] There are also safeguard measures that are non-market-based. They include all the above mentioned supply- and demand-side preventive measures (market-based) that here become compulsory, such as enforced peak-shaving measures, enforced withdraws from commercial storage, enforced use of stocks of alternative fuels, enforced increase of gas production levels, enforced storage withdrawal, enforced utilisation of interruptible contracts, enforced load shedding and so on, and other supplementary crisis measures defined by Member States in their Risk Assessment (stress tests) and by Member States together in their Gas Regional Groups within ACER (GRI ACER) and further included in the Emergency Plans (EP).[42] The protection process also introduces stockholding obligations imposed on Member States that are regarded as key elements of the EU gas security architecture in addition to these safeguard and preventive measures.[43]

The protection process that is at the heart of the negative gas security model in the EU strategy is built upon the dynamic interplay of the trio interconnectedness-interoperability-coordination. As such, these processes have been so far developed as underlying components of the negative gas security model rather than standalone solutions related to creation of an added value. The interconnectedness-interoperability-coordination trio is a core to the protection process since it works towards delivering the required basis for the activation of the preventive and safeguard measures. These are the *infrastructural solutions* (such as interconnected intra-EU gas infrastructure and diversified external gas supply routes), the *procedures and norms* for operating gas market (such as harmonised trade and transit rules as well as an overall standardisation of gas units and parameters) as well as the *strategic cohesion in decision-making* respectively made by and between key stakeholders in the region concerned (such as regional cooperation of adjacent TSOs, SSOs, DSOs, NRAs). However, the required levels of commercial physical interconnectedness and procedural and technical interoperability in the EU gas system are not

met in several places (ACER 2015). The reasons for that are financial, organisational and political. As such, there would be a major difficulty in restoring lost welfare and confidence in freedom that would occur in the event of a major gas crisis. Completing the IEM is critical for the delivery of the negative gas security in Europe.

Having said this, even if the physical infrastructure, procedural solutions and regional cohesion are in place, we cannot forget about the major challenge in cyber security that arises (EECSP 2017). IEM's dynamism and functionality relies on the fluid and secure e-traffic of accurate and timely information that is debited from the data and the Virtual Trading Points (VTP). Rules for electronic processing of statistical data (such as, procedures for storing, receiving and exchanging of this data) as well as relevant IT resources (software and hardware) are needed. Questions of scope and scale of such a cybernetic information system are critical at this stage. The growing importance of an intelligent e-system management for e-business and e-gas commerce as well as e-management in a situation of gas crisis reveals another potential problem, which is that of communication. A variety of actors would have to simultaneously communicate with the system itself (TSOs, DSOs, SSOs, NRAs, gas undertakings, consumers) and with each other and, consequently, undergo a specialised training. The problem, technically speaking, is that these stakeholders often do not speak the same language (if the parameters, ranges, gas quality, etc. are not standardised), or they do not know how to communicate (if the network codes, procedures, etc. are not implemented), or they do not have yet the access to such a system (as the end-users, consumers). It seems that the European Commission is interested in playing the role of an intermediary for electronic gas security proceedings since it is, for example, willing to take over the responsibility "for developing, hosting, managing and maintaining the IT resources needed to receive, store and carry out any processing of the data provided in the statistical summaries" on levels of commercial and specific stocks.[44]

The previously mentioned lack of a cohesive decision-making by the adjacent NRAs, TSOs and so on constitutes a major weakness of the negative gas security in the EU gas policy. For example, rules governing penalties applicable to infringements of the national provisions adopted

pursuant to the Directive 2009/119/EC, dispute resolution methods, and effective, proportionate and dissuasive penalties for market abuse require such cohesion. Similarly, the recommended releases of emergency stocks or special stocks, publishing of the updated information (statistical summaries) about levels of these stocks as well as the necessity to standardise methodology for calculating minimum stock levels all require minimum cohesion in decision-making.[45] The recent Proposal for a Regulation concerning measures to safeguard the security of gas supply attempts to remedy these problems by delegating supervisory and monitoring powers to the Commission on the one hand (by requiring a prereview and approval of the generated Risk Assessment by the Commission) and to the Gas Coordination Group on the other hand (that has the task of assuring the cohesiveness of these different regional plans).[46] This proposal introduces a new mandatory solidarity principle and encourages the establishment of a joint purchasing mechanism for gas in the EU.[47] Similarly, the recent proposal for the Regulation establishing ACER (recast) is crucial to enhancement of a regional cooperation of regulators and grid operators.[48] Also, the Energy Union governance process, if equipped with a mechanism of a common gas purchases (Tusk 2014) and linked to the notion of central stockholding entity (CSE) at the supranational level (that can manage special or emergency stocks), can be regarded as a key element of the EU gas security architecture.[49]

Lastly, it should also be posited that the negative security model suffers from a vicious circle of the need to maintain the required security values: a continuous reproduction of welfare and restoration of the confidence in freedom (in short- and long-term perspective). The demand for gas progressively advances over time. First, gas is identified as the main alternative fuel with a potential for long-term oil substitution and decarbonisation.[50] It means that there will be more demand for the GDP that constitutes "the gas-welfare value" (production of goods and services permitted by the accommodated volume of gas). The second argument here is a more fundamental one, and it concerns the very ontology of the negative security that is built upon a belief that threats and risk can be identified and accordingly counteracted. In the case of the gas security, there is a complex net of uncertainties in which the delivery of gas supply is interwoven. These uncertainties are not only internal such

as system-based (that can be potentially eliminated) but also external—actor-based (e.g. unstable transit zone or dependency on the external largest gas supplier that are difficult to manage or control by the EU). This signifies an increased demand for restoring the confidence in freedom for the EU gas consumers. There is however a way out of this dilemma and this is a solution proposed by the framework of the positive security model.

6 The Positive Gas Security in the EU

The positive security is the ability to create added value: a new quality to the existent values protected in the name of security. In the context of the EU gas security, creating added value is about managing the required volume of gas in such a way that it allows for the delivery of welfare (in the form of goods and services) and freedom which are better in qualitative terms. Positive gas security is an outcome of empowerment and enablement that collectively work towards strengthening the welfare-freedom axis.

What is "the known as good" that "allows for more welfare and more confidence in freedom" in the context of the EU gas security? Something that, at the same time, does not entrap the policy-makers in the vicious circle of merely maintaining welfare and freedom, but instead creates added value and that makes a difference both in quantitative and qualitative terms? What can decrease demand for welfare and decrease demand for confidence in freedom *without negatively impacting* welfare and freedom themselves? It is not such as Catch 22 as it may seem to be at first glance. Let's look at Fig. 11.1 again and think carefully about which processes have the potential to create such an added value in the EU.

The positive security model for gas in Europe can be achieved by an advancement of the moderation process and development of its reduction measures (that stimulate resource-efficient and sustainable gas consumption) and replacement measures (that allow for including gas supplied from sustainable sources: e.g. biomass) and further by associating this moderation process with the privileges (market access, real market choice, virtual market choice) that an individual empowered gas

consumer could enjoy in the future IEM on the one hand and by a better regional coordination of the interaction of actors involved in the process of the EU gas security on the other hand.[51] This model is already being developed in the EU. There have been several signals from the energy policy field that testify to this, and the most recent ones are *Clean Energy Package*, *Energy Union Package*, *European Energy Security Strategy*, *A policy framework for climate and energy* in the period that spans from 2020 to 2030 and preceding this framework *Green Paper on future climate and energy policies*.[52]

The above mentioned documents reveal an emerging pattern of where the EU energy consumer is empowered in the EU energy security strategy and of where end-users of the gas system are sustainable and energy-efficient.[53] These two elements are quintessential to the positive gas security model. In this model, gas security includes not only natural gas but also biogases that are integrated into the natural gas network. Here, the end-user displays patterns of engagement, seeking information, exploring options, and contributing time and money towards the establishment of gas security. In the positive security model, the consumer displays the capacity to conduct fuel switch and tries to obtain easier switching conditions and, also, increases the usage of renewables through the deployment of alternative gas resources.[54] The consumer utilises modern technologies (e.g. smart metres) to better control costs and demands straightforward bills that reflect the actual gas usage. In the positive security model, the consumers possess the "power to manage the energy consumption actively" what gives them an opportunity to tailor their energy liberty.[55] This power translates into positive gas security value: better quality welfare can be created and, potentially, also decrease the need for the gas supply since consumers committed to sustainability and energy-efficiency measures will eventually need less energy-intensive goods and services. Similarly, the demand for restoring confidence in freedom may perhaps decrease since freedom to act and enact security is brought closer to the consumer. With an active gas e-consumer, gas security is customised at the level of the individual user in a local context. As such, gas security is not only a technical task of and an exclusive right reserved for just few stakeholders at the higher levels (national or supranational), but it is also perceived *as a smart choice of the empowered EU*

citizen: an e-consumer who pursues "energy liberty" that a smart grid grants.

The notion of energy liberty can be best comprehended if understood in terms of "an integrated continent-wide energy system where energy flows freely across borders, based on competition and the best possible use of resources, and with effective regulation of energy markets at EU level where necessary" and where "citizens take ownership of the energy transition, benefit from new technologies to reduce their bills, participate actively in the market, and where vulnerable consumers are protected."[56] Also, the Energy Union is very important in the context of the positive gas security model since it attempts to promote an interaction between energy consumers and business, encourage more sustainable solutions in the context of gas markets and, as such, further the goal of energy liberty in Europe.[57] Its importance becomes even more pronounced in the light of the recent proposal on the Governance of the Energy Union. In this proposal, the EU adopted the rhetoric of "added value" through the introduction of a new element of the regulatory fitness (REFIT). REFIT's *added value* is defined in terms of *a new quality* of transparency (simplified and streamlined planning, reporting and monitoring), efficiency (coherent administrative procedures) and affordability (proportionality in the contribution to attainment of common objectives) that this regulatory fitness offers to the Energy Union governance process.[58]

If we now look at Fig. 11.1, the crucial difference that this positive solution creates is that it brings the moderation process closer to the centre of the EU strategy for the gas security. If the positive gas security model is successfully developed, the reduction and replacement measures (both belong to the moderation process) are no longer just complementary to establishing of gas security in the EU, but they have a potential to run at its core, in parallel to the protection process that they complement (the demand-side preventive and safeguard measures that built upon energy efficiency and increased usage of renewable energy resources). This model requires the passive gas market end-user to transition towards being an active gas e-consumer (industrial, commercial and residential) interacting in the IEM for gas through Virtual Trading Points (gas hubs).[59]

Again, there is an assumption here that the IEM for gas is flexible and dynamic so that the positive security value created by an empowered consumer and environmentally aware end-user can be fully realised. This is, of course, a major challenge to the development of the positive gas security in the EU today. Also, implementing the positive gas security model requires a paradigm shift in how the gas business functions on the one hand and the consumers' mindset on the other hand. The change in the organisation of gas business involves the creation of a completely new level of digital e-consumer and an introduction of new methods for pricing and contracting gas capacity. This shift may signify a change in the gas security governance towards a local level of decision-making that could complement the national and supranational levels. Also, empowered and active energy consumers may target the European Parliament (being a driving force to mobilise citizens to act as co-legislators on key initiatives) as a potential channel to enact the EU gas policy and protect their rights.[60] The development of this positive gas security model can also increase the importance of the gas storage magazines and local gas distribution networks (e.g. for Bio-LPG) that the end-users would have to actively interact with and, potentially, contribute to their development or maintenance (e.g. if they produce biofuels or co-finance development of infrastructure). It can also strengthen the role of the local or regional small and medium-sized enterprises (SMEs) that produce energy from renewable resources.[61]

A potential problem that arises here is the trust put in the consumer's choices: the assumption that the end-users will be committed to sustainability and energy efficiency and make their energy choices, accordingly. Educational efforts are necessary to shape the projected habits and achieve a broader understanding of the range of energy security problems. Similarly, financial solutions that support such a green transition in households and made available to the minds of those concerned are necessary so that the consumer's ability to switch fuel suppliers can be fully reshaped. Financial instruments would certainly create the necessary incentive and, also, send a positive signal to the business world and potential investors: make the market prospective and attractive. The empowerment of energy consumers is not only a matter of infrastructure and interoperability of the energy system but also a question whether (or

not) health, wealth and sustainability are the end-users' overarching motive, and if they care about those values. In this regard, these educational and financial measures are necessary to grant a true "energy liberty" to the Europeans.

7 Conclusions

This analysis demonstrates that the EU gas policy in its current shape does not constitute a sufficient solution for the maintenance of gas security in Europe. However, there have been several advancements towards changing this situation that include the recent proposal on the governance of the Energy Union, proposal for a regulation concerning measures to safeguard the security of gas supply, proposal for a regulation establishing ACER (recast) and directive on deployment of alternative resources.[62] As such, the prospects for Europe can be regarded as rather optimistic a lot has been already done and there is more to come. The EU policy on gas is being dynamically developed and is evolving.

The main arguments presented by this chapter are as follows. The EU policy on gas puts an explicit emphasis on the *technical* dimension in the EU gas security while not sufficiently addressing (in the form of directive or regulation) the role of the individual user of the gas system and that of the gas consumer in the creation of a better gas security situation in Europe. Also, gas security is almost exclusively viewed as a matter of securing natural gas supplies, while its definition should also include biomass and other alternative gas supply sources that comply with and support the sustainable fuels strategy in Europe. In the current design of the EU gas policy, the protection of gas flows in the EU depends exclusively on the operationalisation of the Internal Energy Market for gas (necessary for stepping up the safeguard and preventive measures) as well as on a cohesive and timely decision-making between the key stakeholders (National Regulatory Authorities, Transmission System Operators, Distribution System Operators and Storage System Operators). Neither the IEM nor such a cohesion exists in the context of the gas market in Europe today. As a consequence, the required levels of commercial and physical interconnectedness as well as procedural and technical interop-

erability in the EU gas system necessary for activating the protection measures are not met. Hence, there would be a major problem in restoring the required volume of gas in the event of a gas crisis and, as such, in delivering the negative gas security.

As regards the positive gas security, the chapter concludes that this model requires further advancement and a stronger regulation that would underpin it in the EU energy policy. The recent developments in this policy, such as Energy Union Package, Clean Energy Package and European Energy Security Strategy collectively create a fertile ground for an enhancement of this model in Europe.[63] Here, the added value translates into a power of the energy consumers to tailor their energy liberty through their smart energy choices. This power grants freedom towards better quality welfare (since the production of goods and services supported by energy-efficient solutions is less energy-demanding) and freedom (since a possibility to act and enact gas security is pooled closer to the consumer who becomes an active player instead of only being a passive recipient of gas supply). In the positive gas security model, security is customised at the level of the individual end-user in a local context where commitment to sustainability remains persistent. This stands in stark contrast to the solution delivered by the negative security model where gas security is a matter of a strategic choice made by only few stakeholders placed at the national, regional and supranational levels. The final remark is that the Energy Union governance process and the functioning IEM for gas are crucial to maintenance of gas security in Europe since they constitute the necessary conditions for the future enhancement of both the negative and positive gas security models.

Notes

1. EU, "Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union," 2012/C 326/13 (Article 3). See also EU, "Report on the Implementation of the European Security Strategy—Providing Security in a Changing World," 2008 S407/08.
2. EU, "Charter of Fundamental Rights of the European Union," 2000/C 364/01.

3. EU, "Energy roadmap 2050," COM (2011) 885 final.
4. EUROSTAT, "Supply, transformation and consumption of gas—annual data," [nrg_103a] last update: 06-02-2017, and, EUROSTAT, "Imports-gas-annual data," [nrg_124a] last update: 17-02-2017.
5. At the time of writing of this chapter there are 28 member countries in the EU. However, the United Kingdom formally notified to the European Council its intention to leave the EU on 29 March 2017 following the results of the UK referendum on 23 June 2016. See http://www.consilium.europa.eu/en/policies/eu-uk-after-referendum/
6. EUROSTAT, "Energy dependence," Code: tsdcc310.
7. "Natural gas comprises gases, occurring in underground deposits, whether liquefied or gaseous, consisting mainly of methane. It includes both "non-associated" gas originating from fields producing hydrocarbons only in gaseous form, and "associated" gas produced in association with crude oil as well as methane recovered from coal mines (colliery gas) or from coal seams (coal seam gas)." EUROSTAT, IEA, OECD, UNECE. "Natural Gas Annual Questionnaire 2015 and Historical Revisions," (2016):3.
8. For detailed information please consult EUROSTAT, IEA, OECD, UNECE, "Natural Gas Annual Questionnaire 2015 and Historical Revisions," (2016).
9. As we can read in *Quarterly Energy Review for Western Europe* "at the summit meeting of the International Energy Agency (IEA) earlier this year, natural gas not only reached the agenda for the first time, it also dominated it, thanks mainly to the importance attached to the new concept of 'gas security' by the Reagan administration and the battle it waged with its European allies over the supply of Soviet gas to Europe" (EIU 1983a: 1).
10. See also Sadek Boussena and Catherine Locatelli, "Gas market developments and their effect on relations between Russia and the EU," *OPEC Energy Review* 35 (1) (2011):31, for a detailed list of "Gazprom's main joint ventures, acquisitions among its European Union (EU) partners and its main subsidiaries in the EU (end of 2009)."
11. Energy policy is dynamically expanding and its' importance is growing. As Szulecki et al. (2016) note only until 2010 the EU energy policy produced 350 legal policy instruments. See also Cameron (2005), Eberlein (2005), Goldthau and Sitter (2015).
12. EU, "Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators,", "Regulation (EC) No 715/2009 of the European

Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005,", "Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC,", "Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency,", "Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC,", "Council Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products,".

13. EU, "Energy Union Package, A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy," COM (2015)80 final, "European Energy Security Strategy," COM (2014)0330.
14. EUROSTAT, "Final energy consumption by product," Code: ten00095.
15. EUROSTAT, "Energy dependence," Code: tsdcc310.
16. As we can read in the "Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure" hydrogen, biofuels, natural gas, and liquefied petroleum gas (LPG) were identified as the principal alternative fuels with a potential for long-term oil substitution, also in light of their possible simultaneous and combined use by means of, for instance, dual-fuel technology systems.
17. For detailed information please consult ACER/CEER "ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2013" that demonstrates the welfare losses from imperfectly integrated gas markets in Europe.
18. ACER, "European Gas Target Model review and update," 2015.
19. Both G.H. Mead's symbolic interactionism and Charles Peirce's approach on logical structures (theory of signs) are grounded in the tradition of philosophical realism. In this respect, the pragmatic thought of Mead and Peirce is substantially different from the nominalistic pragmatism of Dewey and James. Both Peirce and Mead recognised importance of universal laws in social inquiry and supported the inductive reasoning by applying the moderate conception of generality which allowed for application of "spatiotemporally bounded", thus, limited generals in a social research (Lewis and Smith 1980: 21–22).

20. Consequentialism was also applied to analysis of security by Rita Floyd (2007). See also Hoogensen Gjørv (2012).
21. It is out of scope of this chapter to discuss in-depth the philosophical foundations of the proposed approach. The research presented here was also inspired by Hegel and his dialectics as well as by the conception of *reproduction* present in historical materialism.
22. The process of *complex interoperability* in this study encompasses broader set of rules and procedures for access to transmission networks and rules for access to internal market in natural gas, as well as processes of harmonisation and standardisation of gas exchange across Member States, than the procedural interoperability specified in the Network Code on Interoperability and Data Exchange rules.
23. These generic processes (coordination, interconnectedness, interoperability, moderation and protection) seem to be important also to security of other network-based supplies (e.g. water or electricity).
24. See also David Buchan and Malcom Keay, "Needed: A Demand-Side Strategy," in *Europe's Long Energy Journey: Towards Energy Union?*, David Buchan and Malcom Keay (Oxford: Oxford University Press, 2015), 101–127 for a discussion concerning the energy-efficiency in the EU energy policy and the need for a stronger demand-side strategy in Europe.
25. This capacity is represented by the import, transmission and distribution capacity of the Trans-European gas networks; the transitable capacity that enters and exits these transmission networks; the bi-directional interconnection capacity of the interconnectors; the withdrawal capacity and injection capacity of the gas storage magazines of emergency stocks and specific stocks; the imported, offloaded, re-gasified LNG gas capacity; and the alternative gas capacity injected into the EU gas system in form of hydrogen , biofuels, and natural gas in the forms of Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), or Gas-To-Liquid (GTL), and Liquefied Petroleum Gas (LPG).
26. For detailed information consult a website of Gas Infrastructure Europe, GIE (https://www.gie.eu) and the website of the European Network of Transmission System Operators for Gas, ENTSOG (https://www.entsog.eu/).
27. In the "Directive 2009/142/EC of the European Parliament and of the Council of 30 November 2009 relating to appliances burning gaseous fuels" the EU introduced requirements regarding Community-level harmonisation of standards (technical specifications) for operation and installation of appliances burning gaseous fuels (such as appliances used

for cooking, heating, hot water production, refrigeration, lighting or washing) and fittings where energy conservation is considered essential. Also, there is a growing need for harmonisation of rules and standards (for example technical specifications for interoperability of recharging and refuelling points) in the sector of transport. This need becomes especially pronuanced in light of the recent development of the European strategy for alternative fuels that incorporates usage of LPG (Liquefied Petroleum Gas), LNG (Liquefied Natural Gas) and CNG (Compressed Natural Gas) for transportation purposes (for more information please consult EU, "Clean Power for Transport. A European alternative fuel strategy" COM (2013)17).

28. EU, Regulation (EU) No 994/2010.
29. EU, Directive 2009/119/EC.
30. The EU energy packages for gas market regulation: "Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC", "Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC" and "Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas,".
31. EU, Regulation (EU) No 1227/2011.
32. For detailed information concerning the EU Network Codes please consult EU, Regulation (EC) No 715/2009, "Commission Regulation (EU) No 984/2013 of 14 October 2013 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems and supplementing Regulation (EC) No 715/2009 of the European Parliament and of the Council,", "Commission Regulation (EU) No 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks,", "Commission Regulation (EU) 2015/703 of 30 April 2015 establishing a network code on interoperability and data exchange rules,", "Commission Decision (EU) 2015/715 of 30 April 2015 amending Annex I to Regulation (EC) No 715/2009 of the European Parliament and of the Council on conditions for access to the natural gas transmission networks,".
33. Transmission System Operators (TSOs), National Regulatory Authorities (NRAs), Distribution System Operators (DSOs) and Storage System Operators (SSOs).

34. More on the issue of energy efficiency and rationalisation and modernisation measures can be found in the following documents: EU, "Green Paper 'For a European Union Energy Policy," COM (1994)659, "Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC,", "Energy Efficiency and its contribution to energy security and the 2030 Framework for climate and energy policy," COM (2014)0520 final, "Regulation (EU) No 333/2014 of the European Parliament and of the Council of 11 March 2014 amending Regulation (EC) No 443/2009 to define the modalities for reaching the 2020 target to reduce CO2 emissions from new passenger cars,", "Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO2 emissions from light-duty vehicles,".
35. For example, in COM (2013)17 it is posited that "lack of fuelling infrastructure and common technical specifications on refuelling equipment and safety regulations for bunkering hamper market uptake for LNG" in the European Union. Similarly, the lack of alternative fuel infrastructure and of common technical specifications for the vehicle-infrastructure interface are defined as obstacles to the market uptake of ultra-low emission vehicles in Regulation (EU) No 333/2014.
36. EU, Directive 2009/73/EC, "Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy-efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC," "Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings," COM (2014)0520 final.
37. EU, Directive 2009/73/EC.
38. EU, Directive 2009/73/EC, Regulation (EU) No 994/2010.
39. EU, "Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection,", Council Directive 2008/114/EC, "Green paper on services of general interest," COM (2003)0270, "Services of general interest in Europe," COM (2000)0580.
40. EU, Regulation (EU) No 1227/2011.
41. EU, Regulation (EU) No 994/2010.
42. EU, Regulation (EU) No 994/2010.

43. EU, Council Directive 2009/119/EC.
44. EU, Council Directive 2009/119/EC (Article 15).
45. EU, Council Directive 2009/119/EC.
46. EU, "Proposal for a Regulation of the European Parliament and of the Council concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010," COM (2016)52.
47. "As regards joint purchasing mechanisms, the Regulation makes it clear that Member States and natural gas companies are free to explore the potential benefits of purchasing natural gas collectively to address supply shortage situations. Such mechanisms should be in line with WTO and EU competition rules, in particular with Commission guidelines on horizontal cooperation agreements" in EU, COM (2016)52.
48. EU, "Proposal for a Regulation of the European Parliament and of the Council establishing a European Union Agency for the Cooperation of Energy Regulators (recast)," COM (2016)863.
49. EU, COM (2015)080 final. See also Ole Gunnar Austvik, "The Energy Union and security-of-gas supply." *Energy Policy* 96 (2016): 372–382.
50. EU, "Proposal for a Directive on the deployment of alternative fuels infrastructure," COM (2013)18, "Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure,".
51. Natural gas can be also supplied from methanisation of hydrogen generated from renewable electricity. EU, COM (2013)17.
52. EU, "Clean Energy For All Europeans," COM (2016)860, COM (2015)080 final, COM (2014)0330, "A policy framework for climate and energy in the period from 2020 to 2030," COM (2014)015, "Climate and energy policy," COM (2013)0169.
53. EU, COM (2016) 863.
54. EU, COM (2016)860, COM (2013)18, Directive 2014/94/EU.
55. EU, COM (2014)520.
56. EU, COM (2015)080 final.
57. EU, "New Energy Union Governance to deliver common goals," https://ec.europa.eu/energy/sites/ener/files/documents/technical_memo_energyuniongov.pdf
58. EU, "Proposal for a Regulation on the Governance of the Energy Union," COM (2016)759.
59. EU, COM (2016)863.
60. EU, "Europe 2020. A strategy for smart, sustainable and inclusive growth," COM (2010)2020.

61. EU, Directive 2009/28/EC, COM (2013)17.
62. EU, COM (2016) 52, COM (2016) 863, COM (2016) 759, Directive 2014/94/EU.
63. EU, COM (2015)080, COM (2016)860, COM (2014)0330, COM (2016)863.

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12

The Global Oil Market and EU Energy Security

Dag Harald Claes

1 Introduction

> With both energy consumption and dependency on oil and gas imports growing and supplies becoming scarcer, the risk of supply failure is rising. Securing European energy supplies is therefore high on the EU's agenda[1]

As this quote shows, in 2010 the EU prioritised energy security based on an observation of growing energy demand and scarcity of supply. In 2014 the European Commission based its assessment of oil security on superpower interdependence: "The interdependence between the EU, US, and Russia in relation to oil, the availability of oil stocks, and the ability to trade and transport oil globally, means that there is no immediate threat for the EU in relation to its oil supplies" (EC 2014: 10). Today, only 3 years later, one could wonder if the interdependence between the EU, the United States and Russia is still a solid basis for European secu-

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rity of oil supplies. EU sanctions following the Russian annexation of Crimea and the rhetorical nationalism of the newly elected US President, Donald Trump, suggest the need for an independent EU oil security strategy. However, as the EU imports almost 90 per cent of its crude oil consumption, it is hard to see how the organisation could gain the upper hand in grand-scale political oil bargains. It is also in line with fundamental tenets of the EU to rely on a market-based approach to oil security (CIEP 2004).

This chapter starts out by way of a historical exposition of how the governments of the United Kingdom and France played a vital part in designing the global oil regime of the early twentieth century and how this role was undermined—first by the dominant position of the International Oil Companies (IOC) and later by the Organization of Petroleum Exporting Countries (OPEC). There then follows a discussion of the fundamental challenges to European security of oil supplies stemming from the depletion of global oil resources. Finally, the EU oil security situation and strategic challenges are discussed. First, however, some remarks regarding the concept of energy security are necessary.

2 The Concept of Energy Security

The literature on energy security is largely derived from general energy studies and thus is not well-informed or related to general security studies in political science. A number of theoretical approaches to international political security could also be applied to the energy sector. As an illustration, the Copenhagen School emphasises the way an issue becomes a security issue, through a process of securitisation. Securitisation is defined as a successful speech act "through which an intersubjective understanding is constructed within a political community to treat something as an existential threat to a valued referent object, and to enable a call for urgent and exceptional measures to deal with the threat" (Buzan and Wæver 2003: 491). As Stritzel points out, this has immediate and significant implications for policy: "The articulation of 'security' entails the claim that something is held to pose a

threat to a valued referent object that is so existential that it is legitimate to move the issue beyond the established games of 'normal' politics to deal with it by exceptional, i.e. security, methods. This puts an actor in a very strong position to deal with an issue as he/she thinks is appropriate" (Stritzel 2007: 360). Following the Copenhagen School, by defining reliable and affordable energy supplies as a security issue, certain policy implications arise: in particular the kind of means that are available and—more importantly—which means are appropriate. Defining energy supplies as a security issue contradicts the presumption that oil consumers should rely on market mechanisms, international institutions or the goodwill of other actors (such as Arab allies). The economic and commercial elements of energy supply are far more prominent today than in the 1970s. The implication is obvious: "Energy interdependence and the growing scale of energy trade require continuing collaboration among both producers and consumers to ensure the security of the entire supply chain" (Yergin 2006: 78). Others have argued for a more sophisticated system of global governance of energy (Goldthau and Witte 2010). Such changes presuppose a de-securitisation of both the concept and the understanding of energy security. In fact, the well-established definition of energy security as: "adequate, reliable supplies of energy at reasonable prices in ways that do not jeopardize major national values and objectives" (Yergin 1988) would, in most cases, imply a de-securitisation in the Buzan/Wæver sense of the term. However, it is necessary to disentangle the various elements of the energy security concept in order to arrive at a more nuanced understanding of (a) how structural changes (both political and economic) create constraints and opportunities for achieving energy security, (b) the mechanisms involved and (c) the policy implications that follow. In brief, this suggests that oil supplies are insecure in a *physical sense* if global oil resources are actually depleted, insecure in an *economic sense* if the costs of producing oil increase beyond consumers' ability to pay for it and insecure in a *political sense* if they are only attainable by jeopardising fundamental political values or objectives.

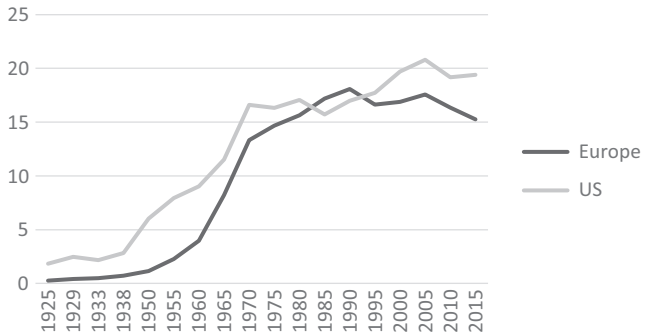

Fig. 12.1 European and US oil consumption, 1925–2015, million barrels per day (mbd) (Source: 1925–1960: Darmstadter et al. (1971): 622–630, 1965–2015: BP (2016))

3 The History of Securing Oil Supplies to Europe[2]

3.1 Increase in Consumption and Political Supply Control

This book is focused on Europe, a region with high oil consumption but one that has produced a significant amount of oil for only about the last 40 years. Historically, this has made oil supplies a matter of imminent concern for European state leaders. In the first half of the twentieth century, oil consumption grew dramatically (Fig. 12.1). As both military and commercial use of oil increased, the need for securing control over access to foreign oil became a pressing issue for Europe. This, in particular, contrasted with the situation in the United States, which up to the Second World War, was a net exporter of oil, while Europe hardly produced oil at all (Fig. 12.2).

The political importance of oil was demonstrated when Winston Churchill, as First Lord of the Admiralty prior to the First World War, changed from coal to oil as the power source for the Royal Navy. With the United Kingdom war machine dependent on Middle Eastern oil instead of British coal, securing oil supplies turned into a high-level foreign policy and security issue. The area to look for oil was the Middle

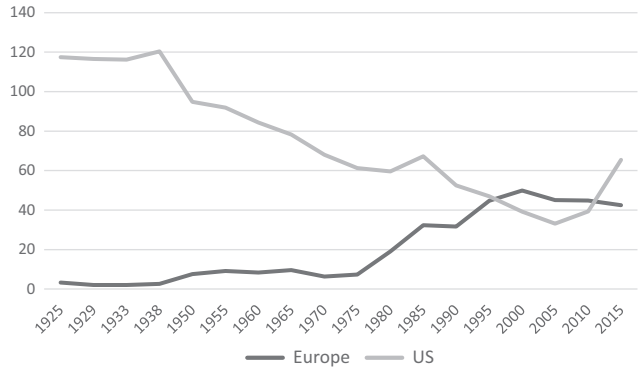

Fig. 12.2 European and US oil production as share of consumption (%) (Source: 1925–1960: Darmstadter et al. (1971): 622–630, 1965–2015: BP (2016); Note: 1925–1960 Western Europe, 1965–2015: Europe excl. Russia)

East. The United Kingdom made Mesopotamia a British mandate under the League of Nations. In connection with the San Remo agreement, an Anglo-French oil agreement was negotiated. "France would get 25 percent of the oil from Mesopotamia. … the vehicle for oil development remained the Turkish Petroleum Company … and the French acquired what had been the German share in it. … the French gave up their territorial claim to Mosul. Britain, for its part, made absolutely clear that any private company developing the Mesopotamian oil fields would very definitely be under its control" (Yergin 1991: 189–190).

With the British/French dominance in the Middle East, access seemed closed to US interests. However, with the breakdown of the Ottoman Empire, the status of the Turkish Petroleum Company concession was unclear, and the oil companies started a long and bitter fight for influence in the formerly Turkish-dominated area. The US government responded by invoking "the open-door policy," which had three elements: (a) that the nationals of all nations be subject, in all mandated territories, to equal treatment in law, (b) that no economic concessions in any mandated region be so large as to be exclusive, and (c) that no monopolistic concession relating to any commodity be granted. The US government maintained that the war had been won by the Allied and Associated Powers fighting together and that, consequently, any benefit—whether in oil

interests or otherwise—should be available to the nationals of all the Allied powers and should not be seized by those of any one particular power (FTC 1952: 51–52). After year-long negotiations, in 1928 the United States, the United Kingdom and France reached a compromise. American companies received about a quarter of the Iraq Petroleum Company (IPC, formerly the Turkish Petroleum Company) concession. It was additionally agreed that all parties (companies and authorities included) should work jointly—and only jointly—in the region (Yergin 1991: 204). The region included the Arabic peninsula (except Kuwait), Iraq and Turkey. This was the so-called Red Line Agreement. In the areas inside the red line, the companies would pursue joint concessions.

Up until the Second World War, the security of oil supplies was handled very much in line with the traditional colonial and imperialistic behaviour of powerful oil-consuming states. The governments controlled the trading companies by the granting of concessions or direct ownership. The governments competed and colluded in order to secure political control over the oil-rich areas of the Middle East. Underneath this political order, a parallel system emerged among the Western oil companies, one which was to become dominant after the Second World War.

3.2 Security of Supply in the Hands of Companies

The Second World War represented a demonstration of the importance of secure oil supplies. The lifeline of the war operations in Europe was based on the steady flow of oil from the United States in convoys across the Atlantic Ocean. The convoys came under heavy attack from German submarines, but in 1943, the submarine attacks were reduced, partly due to the capture and code-breaking of the German Enigma machine. The halt of the German advances towards the oil fields in the Caucasus was another crucial oil-related war event and likewise the weak supply lines for oil in the North African advances of Field Marshal Erwin Rommel. The importance of secure oil supplies could hardly have been demonstrated more vividly than in Europe and elsewhere during the Second World War.

After the Second World War, the commercial role of oil exploded with the motorisation of daily life. During the 1950s and 1960s, oil was per-

ceived as abundant given the vast number of new discoveries—in the Middle East and North Africa in particular. Having secured access to foreign petroleum resources as a vital part of their war strategy, the parties did not see the peace settlement as any reason to relinquish their control over these resources. On the contrary, as consumption in industry and consumer markets increased, the companies had a substantial economic interest in maintaining control over the international oil market. Without the war, the need for governmental involvement was perceived as less immediate. Together with the overall establishment of a liberal international trade regime, direct political interference in the international oil market was reduced, and the oil market became dominated by a small group of Western companies, known as the Seven Sisters.[3] The Seven Sisters accounted for virtually all the oil produced outside the United States and the Second World, and they controlled and dominated the entire production chain, from exploration to sale of the refined products. The Sisters also organised their operations in the Middle East through a consortium which ensured that all the major companies were engaged in at least two countries. In this way, the Sisters stood stronger against possible regulation by the producing countries, as none of them was totally dependent on the will of one government only. This created a stable and integrated structure, although in the hands of companies, not governments.

3.3 The OPEC Challenge

During the 1950s and 1960s, North African oil exploration, outside the Red Line defined in 1928, intensified. North African oil did not have to be transported through the conflict area around the Gulf and the Suez Canal. Libyan oil contained less sulphur than most Gulf oil qualities; thus, it was cheaper to refine and could be priced higher than the heavier crudes of the Gulf region. In 1969, a coup d'état Libya made Muammar al-Qaddafi president. A few months later, the new oil minister, Ezzedine Mabrouk, told the oil companies operating in Libya that the government wanted negotiations about a price rise. Libya was less dependent on the Sisters, as other Western companies were responsible for almost 52 per

cent of Libyan oil production. Libya was outside of the Red Line (see above). By playing the independent Occidental companies and the Sisters against each other, Libya managed to raise the posted prices and the take the government received from them. After the Libyan affair, Iran and Venezuela increased their share of profits and a "game of leapfrog began" (Yergin 1991: 580): Why should Libya get a better deal than the other producers? Two agreements between the companies and producing countries were concluded in the spring of 1971—the so-called Tehran agreement between the international oil companies and the OPEC members exporting through the Persian Gulf and a similar agreement for the OPEC members exporting through the Mediterranean, called the Tripoli agreement. The two agreements covered tax and price increases and inflation compensation and fixed such rates for future years. The effects of the agreements were a 21 per cent price increase for Saudi Arabian crude (from $1.80 to $2.18) and an increase in government revenue of almost 40 per cent. What was more important, however, was the fact that the producer countries had now gained control over the price setting. Although the physical availability of oil supply seemed secure, as the new discoveries were made both in North Africa and in the Middle East, the price of oil was now in the hands of the oil-producing countries. Soon, also the physical supply became a matter of the greatest political tension.

On October 6, 1973, Egypt and Syria launched an all-out war against Israel with the aim of liberating the Sinai Peninsula and the Golan Heights, territories that had been occupied by Israel 6 years earlier during the Six-Day War. On October 17, Arab oil-exporting countries announced their intention to reduce production by 5 per cent per month until Israel retreated from the occupied territories and the rights of the Palestinians were restored (Blair 1976: 264). On October 19, the United States announced a new military aid package to Israel. All Arab exporters embargoed the United States and US forces abroad, while Saudi Arabia and Kuwait increased their across-the-board cutbacks to 10 per cent compared to the September level (Evans 1990: 441). The Netherlands was embargoed later in October, due to their pro-Israeli policy, and Iraq nationalised US and Netherlands interests in the Iraq Petroleum Company. On November 4, the Conference of Arab Oil Ministers

decided a uniform 25 per cent cutback compared to September level, to be followed by additional 5 per cent in December (ibid). Saudi Arabia's Sheik Yamani later called the embargo a legitimate political action: "We watched America and learned how they use one's economic power to meet political objectives. We studied this carefully" (Robinson 1988: 95). Saudi Arabia took a large portion of the cutbacks. However, the Kingdom cancelled cutbacks for December 1973, and on December 25, the Arab oil ministers ordered a 10 per cent increase in production for January 1974. By January, OPEC overall production had increased again. No physical shortage of oil emerged, but expectations that the future might lead to a supply shortage drove up prices: "Nobody knew how long the cutback would last or how much worse it would get" (Adelman 1995: 110). The official Arab light oil price increased from $2.40 per barrel in March 1973 to $10.95 in January 1974.

A number of political issues are related to the embargo in the autumn of 1973, internally among the OPEC members, in the relationship between oil producers and consumers in general, and for the foreign policies of the United States and European countries. The aim of reducing the dependency on foreign oil became a matter of highest political urgency: "Aside from our military defence, there is no project of more central importance to our national security and indeed our independence as a sovereign nation" (Kissinger 1982). In the context of this chapter, the reactions in consumer countries are most relevant, and here, the price increases were, to some extent, seen as a symptom of resource scarcity. It fitted well with a recent influential publication from the Club of Rome called *Limits to Growth* published in 1972. "Its arguments were a potent element in the fear and pessimism about impending shortages and resource constraints that became so pervasive in the 1970s, shaping policies and responses of both oil-importing and oil-exporting countries" (Yergin 1991: 569). Robert Pindyck (1978: 36) refers to a CIA report claiming that "a crisis is likely to occur in the early 1980s as world energy demand exceeds supply, resulting in shortages of energy, rapidly rising prices, and economic contraction in all of the industrialized countries. … This view has had an important role in forming the rationale for the Carter administration's energy program." There was no shortage; the price increase was a result of OPEC exercising market power, not a lack

of available resources. As Pindyck (1978: 51) concludes: "The kind of worldwide energy crisis of concern to the CIA and the Carter administration is unlikely to occur." Nevertheless, the oil price was to increase once again. In the autumn of 1978, opposition to the Shah of Iran intensified, including strikes in the Iranian oil industry, which almost brought production to a halt in January 1979. Despite the fact that the other OPEC countries easily compensated for the disappearance of Iranian oil, demand increased as the buyers scrambled to secure their access to crude oil in case of a future demand surplus. From December 1978 to October 1979, the spot price increased from $13.80 per barrel to $38.35.

After the 1973 price shock, European oil consumption soon picked up again and continued to increase, but the 1979 price shock represented the peak of European oil consumption. The new price level triggered conservation, increased efficiency and substitution away from oil. In hindsight, it is also easy to conclude that oil had become overpriced. OPEC entered hard times trying to sustain the price level, until the oil price collapsed in 1986. The low price that followed did not increase European oil consumption as many European governments took the opportunity to increase taxes, instead of transferring the low crude oil price through to the product prices (Claes 2001: 69–75).

On the political level, the 1973 oil shock triggered the establishment of the International Energy Agency (IEA). In 1974, the US Secretary of State, Henry Kissinger, convened a conference in Washington with the aim of creating an organisation to counter the market power of OPEC. Later the same year, IEA was established with broader and less anti-OPEC aims. The core aim of the IEA was to handle future oil supply disruptions using an emergency oil crisis management system, originally triggered by a 7 per cent reduction in daily oil supplies. But in 1979, a more flexible system of crisis cooperation was adopted, and this was used again in the Gulf War in 1991 and following Hurricane Katrina in 2005. The IEA has become a vital institution for providing information on international energy, and its agenda-setting role has increased in recent years. However, as a market-governing institution, it is safe to conclude that the IEA "has limited authority in rule creation and enforcement" (Kohl 2010: 198), although the organisation might contribute to coordinated consumer behaviour by other means, such as information and state-

ments regarding the market situation and proposals for joint action by member states. Some European countries have tried to create a dialogue between oil producers and consuming countries. In 1991 ministers from oil-producing and oil-consuming countries met in Paris. Such meetings have continued every 2 years and morphed into an organisation called the International Energy Forum (IEF), which, since 2003, has had a permanent secretariat in Riyadh (Lesage et al. 2010: 61–63). The confrontation of 1973 is long gone, but its passing has not led to the emergence of an overall global energy regime complex (Colgan et al. 2012: 130–31).

4 Global Oil Scarcity

The security issues related to political conflicts in the Middle East are still prominent, but the direct connection to oil supplies is less so. However, the rise in oil prices from 2003 to 2008 was interpreted by some as a structural phenomenon indicating a fundamental shortage of oil reserves globally (Areklett et al. 2010; Campbell 2005; Deffeyes 2005). In particular, those belonging to the Peak Oil School predicted that oil prices were soon set to increase dramatically due to a lack of sufficient reserves to meet increasing oil demand. If the world ran out of oil, this would of course affect Europe as well as other regions of the world. If one believes that the world is on the verge of running out of oil, the perception of both commercial and political aspects of the market changes dramatically. No political decisions could change this geological fact, so political attention would turn to alternatives. Available alternatives and more uncertain infant energy industries would probably attract large public subsidies. The perception of a fundamental threat to the existence of the modern world would emerge. In addition, the market actors' assumption of the availability of resources in the future is important for the present market situation. A fundamental geological depletion of world oil resources would create a continuous and almost unlimited increase in prices as the probability of supply shortage increases. To run out of oil would be dramatic, the question is—is it likely to happen?

Whenever oil prices are high, doomsayers predict the end of oil because the price increase is interpreted as signalling scarcity. A prospect of a

future lack of available reserves increases demand in order to secure supplies in the present. This increased demand further raises prices, which again are interpreted as indicating oil scarcity. What is forgotten is that the oil market is a so-called cyclical market. When prices are low, oil consumption increases and the development of new reserves is put on hold. This combination of increased demand and reduced supply makes prices increase. When prices become high enough, demand is reduced and more reserves are profitable to develop, and therefore prices decline. The market psychology, institutional constraints and political factors can either reduce or enhance the volatility of this cyclical movement of the oil price. Interpreting price increases as being caused by scarcity would imply a continuous increase in prices, which, so far, has never been seen in the history of oil.

The true signal of scarcity is a sustained increase in the costs of replacing the oil produced with new reserves. A large portion of the world's oil reserves are, in fact, located in countries with falling replacement costs (Adelman 1993b). There is unarguably a fixed amount of physical oil resources in the world. However, the number of economically defined reserves we are able to profitably extract is increasing over time, due to technological advances and increased efficiency in the oil industry. Thus, whatever "is left in the ground is unknown, probably unknowable but surely unimportant; a geological fact of no economic interest" (Adelman 1993a: 220). When the oil price increases, production costs also tend to increase, but this is not due to any lack of available reserves or the development of more remote or complicated oil provinces. The production costs increase due to the absence of cost control in the oil industry when profit increases.

Breakdown of total costs show wide variations in the cost structure of oil production. Large producers in the Middle East, like Iran, Iraq and Saudi Arabia, have low production costs and taxes, but higher transportation costs. Russia has a high tax share of the total costs. Figures presented by *The Wall Street Journal* in 2016 show a sample of countries producing a third of the world's total oil production have total costs of less than $20 per barrel. The actual production costs, excluding taxes, capital spending and transportation, are around $5 per barrel for the United States, around $4 for Norway, about $3 for Saudi Arabia and Russia and around $2 per

barrel in the case of Iran and Iraq.[4] Thus, it is possible to produce large quantities of oil at very low cost. In some of these countries, the geology is very favourable. In other cases, like US shale and Norwegian offshore, technological advances and efficiency gains have turned resources into profitable reserves. Such advances are likely to continue. There are no signs today that overall replacement costs are increasing, nor does the present production level seem to be depleting world oil reserves. The so-called R/P ratio divides the total proven oil reserves by the production level and expresses the number of years the present production level can be sustained given the proven reserves. In 1980, the world's R/P ratio was 25 years. In 2015, the figure was 52.5 years.[5] Not only have the world oil reserves been sustained, they have increased even relative to higher production levels. The claim that the world is "running into oil, not out of oil" still holds (Odell 1994).

5 EU Oil Security Situation

From the perspective of the consuming countries, the 1970s was a period of a highly politicised oil market and in certain situations, as in 1973, clearly securitised. Oil was in general physically available, although it was perceived both as scarce and as a potential political weapon in the hands of the producers. Following the oil price fall of 1986, this perception changed dramatically. With slower growth in demand and a low price, oil was abundant and affordable—just like any other ordinary commodity. Furthermore, the low price motivated the oil producers to introduce trading methods which removed price setting from their control and placed it in the hands of the oil traders (Mabro 1987). The increased competition for outlets in the mid-1980s created various instruments for discounts and hedging.

Over the years, a 24-hour, free-trading oil market has emerged, replete with spot prices, instant price references and internet-based oil exchanges. The idea of a single producer, or group of producers, withholding oil from a particular consuming country or group of countries, is simply not conceivable in the present market. The other side of the coin is a spot price far more responsive to any kind of information which might affect

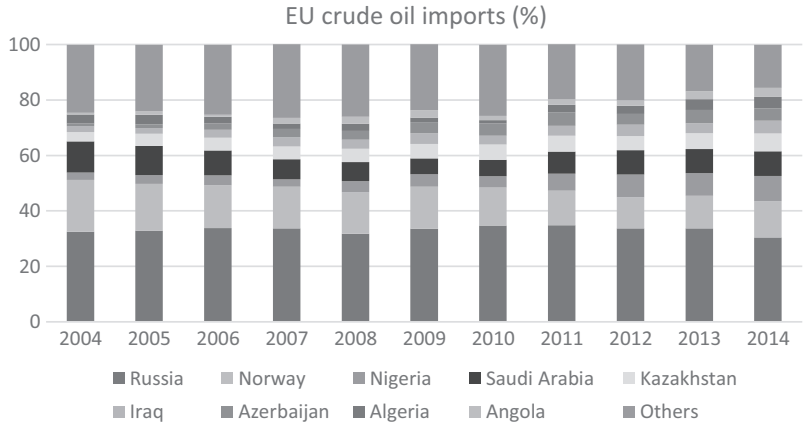

Fig. 12.3 Origin of EU-28 crude oil imports (%) (Source: Eurostat (2016))

its position. However, this is less of a challenge for political leaders aiming to secure physical supplies, as it is for the producing countries who want to control the oil price. This free-trading market structure does not preclude the consumers applying political means in order to improve their security of supply. The last part of this chapter is devoted to such efforts from the European Union, but first it is necessary to identify the origins of EU oil supplies (Fig. 12.3).

In 2004, Russia and Norway were responsible for more than half of the EU's crude oil imports. By 2014, the role of these two countries was slightly reduced to about 43 per cent, but Russia still constituted around 30 per cent. As indicated above, most of the oil from these suppliers takes the form of trade in a commercial free-trade market. On the political level, the EU faces very different suppliers—economically, politically and culturally. Thus, the Union will have to be flexible and responsive and able to enter into contrasting kinds of political dialogue with each supplier.

The counterparts of the EU differ widely with respect to their position on free trade. The one energy supplier that, in fact, is part of the Internal Energy Market is Norway. Norway appears to be of minor importance if one reads the energy strategy documents of the Commission, but this is probably a result simply of the perceived economic and political proximity between the EU and Norway. In fact, Norway is the second largest supplier of both oil (approx. 13 per cent) and gas (approx. 31 per cent)

to the EU. The energy relationship between the EU and Norway has, for most of the time, been cooperative and based on commercial principles, although there have been instances when even this relationship has had certain political and conflictive features. By far, the most important supplier of energy to the EU, however, is Russia. Energy relations with Russia are particularly important in the gas market, but oil supply from Russia is also given special attention by the EU, both in terms of Russian market strategies and internal concentration in the Russia oil industry (EC 2014: 10–12). Russian foreign economic policy has obviously changed, initially from an extremely low score on free trade during the Soviet era when the country was a prominent advocate for the planned economy. During the first decade after the break-up of the Soviet Union, it seemed as if Russia would rapidly enter the pool of market economies. However, the experience over the last two decades has weakened this assumption. When it comes to its energy relations with Russia, the EU will have to "shoot at a moving target" as some of the underlying features of Russia's economic system are subject to change. Since increased power is located in the hands of the president, the policy can easily shift in line with the personal ideas and the interests of the particular power base of different presidents. The importance of flexibility seems greater than ever. The latest conflicts over Russian annexation of the Crimean peninsula and the war in Ukraine obviously increase the securitisation of all energy relations with Russia (see chapters 9, 10 and 11). When it comes to other regions like the Caucasus, the Middle East and Africa, the market approach doesn't seem a feasible strategy for several decades, if ever. Thus, the strategies towards these regions imply more use of political instruments. In 1989 the Gulf Cooperation Council (GCC) and the EU signed a cooperation agreement, which prescribes future negotiations on a Free Trade Agreement (FTA) between the EU and the GCC. FTA negotiations started in 1990 but soon reached a deadlock. Despite the lack of an FTA, trade and economic exchange between both regions has increased. The GCC is currently the EU's fifth largest export market and the EU is the top trading partner for the GCC with an 18 per cent share of total GCC trade. As the (enormous) Eurogulf study shows, there are substantial gains to be made from energy integration between GCC and the EU (Luciani 2005). In the oil sector, the study argues that "80 per cent of conventional oil pro-

duction, up to 104 million barrels per day, could be developed and operated at a cost of less than $8 per barrel … perhaps $12–$14/bbl" (Luciani 2005: 7).

6 EU Oil Security Challenges

There are two main challenges for the EU in order for it to become a global political force in the governance or diplomacy of the global oil market: Do the member states want to take on such a role, and do the EU institutions have the capacity to do so?

Political Will In the EU Commission's green paper, "A European Strategy for Sustainable, Competitive and Secure Energy" (EC 2006), the need for a coherent external policy is identified, and the member states are called upon to support such a position. A number of key goals are set out including a clear policy on securing and diversifying energy supplies, energy partnerships with producers, transit countries and other international actors, reacting effectively to external crisis situations and integrating energy into other policies with an external dimension. With the possible exception of the last goal, all these ambitions are dependent on other actors. In such political-economic negotiations the EU does have one valuable asset: the inclusion of energy into broader integration processes: "In line with the European Neighbourhood Policy and its Action Plans (and in addition to the current work undertaken through Partnership and Cooperation Agreements and Association Agreements), the EU has, for some time, been engaged in widening its energy market to include its neighbours and to bring them progressively closer to the EU's internal market. Creating a 'common regulatory space' around Europe, would imply progressively developing common trade, transit and environmental rules, market harmonisation and integration. This would create a predictable and transparent market to stimulate investment and growth, as well as security of supply, for the EU and its neighbours" (EC 2006). The potential for linking issues together increases, as more sectors are included in the negotiations and integration processes. In 2015, the EU Council concluded that EU Energy Diplomacy should

have less regulatory ambitions and place greater reliance on traditional diplomacy (EU Council 2015).

Institutional Capacity The European history of integration is an impressive story of the transformation of interstate cooperation into a polity in its own right, although with several shortcomings when unfairly compared to the polity of modern fully fledged national states. For the purpose of this chapter, it is of interest that a key element of this integration process is a combination of political bargaining between states and institution-building at the community level. Looking back at the recent history of the Internal Energy Market, these features are very clear. They are perfectly suited for what is known as "negative integration," where the purpose is to remove existing barriers between countries. When the ambition extends to building new policies at the community level, some additional features of the polity become essential. For instance, one needs the capability to formulate policy proposals and gain the support of stakeholders, different parts of the political elite and, preferably also, the public. A general observation concerning the European integration process over the last decades is new challenges arising from this shift from negative to positive integration (Scharpf 1999). Taking this even one step further, we can ask what kind of features are needed once the EU aims at developing a common policy towards other actors outside the community. One important factor in the literature on foreign policy is the importance of internal coherence. The minor role of the EU in the Iraq crisis was, of course, due to the strong interests of the United States, but the fact that the EU countries could not, or would not, agree on a common policy obviously weakened their power as critics or allies of the United States. In international relations, one also needs the willingness and ability to act and, in certain cases, to act with vigour (Baldwin 1979).

7 Conclusion

The disentangling of the concept energy security suggested in the introduction, taken together with the empirical observations made in this chapter, generates two different concluding remarks: a structural and a

strategic one. The first refers to the physical sense of oil security and the second to the economic and political perception of oil security mentioned in the introduction.

Regarding the structural dimension, the fundamental question is to what extent the geologically defined fixed amount of oil has any significant economic or political implications. Presently, and for the foreseeable future, the geologically defined amount of oil resources in the ground is a geological fact of no economic or political importance (cf. Adelman 1993a). A widespread perception of a physical shortage of oil is unlikely and can only have the economic effect of increasing prices and the political effect of fomenting conflicts.

The strategic dimension captures what kind of policy or strategy most effectively increases the actors' perception of possessing a secure energy future—in this case the European countries and the EU. Here, we can see two very different paths presently available: the globalisation strategy of the liberal free market and free-trade policies and the mercantilist approach of trying to gain exclusive access to energy resources and reserving them for your own national consumption. As argued above, the EU is destined to follow the first path, although the fruitfulness of these two strategies depends on what is perceived as the most important element of energy security. If supply security is predominant, Churchill's conclusion—"safety and certainty in oil lie in variety and variety alone"—still holds.[6] However, I would argue that in modern times the physical supply of oil has hardly ever been severely jeopardised. The important element of energy security today is related to the *price* of oil. Taken together with the fact that we do have a globally interconnected and fully liberalised market for oil trade, variety has no meaning, as the price will be same, and increase simultaneously, for oil delivered from all sources. In such a market, the old type of geopolitics comes across as very ineffective. However, the strengthened internal energy policy of the EU suggests that oil security can increase as a by-product of intensified efforts on the part of the EU member states to increase energy efficiency and de-carbonise the energy consumption of the Union at large. These efforts will most likely affect oil less radically and later than coal and natural gas, but even the oil sector will eventually feel the effect of the European energy transition. Alas, a topic beyond the scope of this chapter.

Notes

1. http://ec.europa.eu/energy/security/index_en.htm. Accessed on August 29, 2010.
2. In this chapter, 'Europe' is an imprecise concept. In discussions of current oil-related political affairs, the focus is on the European Union. In current oil-related economic affairs, the focus is on European oil consumption, including all European countries. In the historical parts, the focus is mainly on Western European countries.
3. The designation "the Seven Sisters" was first used by the Italian oilman Enrico Mattei and was later used as the title of Anthony Sampson's book about the seven largest oil companies (Sampson 1975: 11). This group comprises Exxon, Mobil, Standard Oil of California, Texaco, Gulf (all American), British Petroleum (BP; 51 per cent of the shares were formerly held by the British government) and Royal Dutch/Shell (60 per cent Dutch and 40 per cent British). Compagnie Francaise des Pètroles (CFP) is sometimes included in this group, despite representing a minimal share of world production (approximately 1.2 per cent in 1950) (Schneider 1983: 39).
4. WSJ News Graphics, April 15, 2016, http://graphics.wsj.com/oil-barrel-breakdown/. Based on Rystad Energy Ucube.
5. BP Statistical Review of World Energy, 1980 and 2016.
6. Quoted in Yergin 2006: 69.

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Conclusion

Kacper Szulecki

Energy security rhetoric has a different flavour depending on where you stand. It carries different meanings and refers to different objects. Although official policy definitions of energy security are broadly similar across countries, emphasising the reliability and affordability of access to sufficient energy resources for a community to uphold its normal economic and social functions, it is also acknowledged that perceptions of energy security vary. That variation is important, for how states perceive security issues shapes their actions—both in international relations and in domestic politics.

Is coordinated governance and a common EU energy policy achievable? This volume emerged from the conviction that apart from different economic path dependencies, levels of development, resource endowments, geographies of infrastructure—together shaping the material context of energy production, transmission and consumption—what matters in shaping national energy policies are perceptions of energy security. By consequence, if these perspectives are too disparate, they become an

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impediment for joint decision-making, harmonising policies and adopting a common EU strategy for energy governance.

And so, we embarked on a study which strived to understand and, to some extent at least, explain these differences. In this most of the authors were following an analytical definition of energy security seen as 'low vulnerability of vital energy systems', developed by Aleh Cherp and Jessica Jewell, who also kindly agreed to provide a foreword for the report of our struggles. This definition proved important for three reasons. The first one was very practical. It freed us from the curse of much of the energy security literature, which either uses dozens of pages in relentless and somewhat tiresome debates about the 'true meaning' of energy security or toddles around in circles having adopted a conventional, policy-derived definition to explain actual policies. Secondly, it was an impulse to look at energy policy from the perspective of energy systems, which provided a way of focussing our analyses. Finally, their conceptualisation of vulnerabilities and vital systems invited an interpretivist approach and provided an entry point for a wider range of critical perspectives on energy security.

This volume is an attempt to deepen the debate on energy security by moving beyond its seemingly objective nature in policy debates. It gathers contributions that shed light on the conditions under which similar material factors (e.g. countries' energy mixes) are met with very different energy security policies and divergent discourses. Furthermore, it problematises some established notions prevalent in energy security studies, such as whether energy security is 'geopolitical'—and an element of high politics—or purely 'economic' and should be left for the markets to regulate.

What have we learned? What still needs to be explored? In the book's first part, we looked at the ways energy security can be approached differently by two neighbouring countries and in four different sectors (natural gas, shale, nuclear and renewable energy—the latter together comprising the power sector). Using the securitisation model, supported by the concepts of riskification and security jargon, we traced the dynamics of energy security debates and tried to explain how energy becomes a security problem. The case studies varied in their methodological positioning vis-à-vis a more 'positivist' and a consciously 'interpretive' approach. The

former focusses more on 'measuring' the differences in energy security perceptions (see Chap. 3, and partly Chap. 5), and the latter attempting to grasp which intersubjective frameworks can account for the ways energy security is articulated, how these discourses are reproduced and how they condition policy debates (Chaps. 4 and 5 to some extent).

We have indeed found considerable differences not only in the levels of energy securitisation (which were, perhaps surprisingly, on the whole, quite low), but more importantly in the emphasis given to different threats and attention paid to different energy systems (and so, logically, level of their *vitalness*). Assuming that energy security emerges at the junctures of sociotechnical and security imaginaries, we have confirmed (much less discovered), that trans- and international issues, closer to foreign policy, involving politicians, tend to see spillovers from national security debates, which increases the saturation with security jargon and depth of securitisation.

Aleksandra Lis' Chap. 4 bridged our overly political discussions with science, technology and society (STS) studies and provided a very interesting input on how epistemological positions and the types of scientific procedures adopted can also provide the base for distinct riskifying and securitising moves. Similar patterns, though only sketched, were visible in the other highly complex, scientified and risk-laden sector: nuclear energy.

As noted, one of the implicit goals of this volume, and the project on which Part I rests (though Chaps. 10 and 11 in Part II also share that spirit), is that of bringing an interpretivist approach to energy security studies. Chapter 6 by Andy Judge, Tomas Maltby and this author tries to draw some conclusions from the above empirical experience and propose paths for future research, following that approach. Since we initially adopted the classic Copenhagen School framework to securitisation, the chapter discusses its strengths as well as the limitations that became evident in that empirical endeavour. A lot of ground remains to be covered, not just in terms of the empirical breadth, that is, looking at other EU Member States or beyond Europe. Marco Siddi's contribution in the second part takes the concept of securitisation and applies it to EU-Russia relations but draws on social constructivism more broadly to explain the differences in security discourses across Europe. Securitisation can help

grasp the specificity of energy as a security sector, following a unique logic. More dynamic, sociological accounts can emerge, looking at the way audiences and context influence energy security debates and tracing securitisation as a social practice. Finally, stronger emphasis on explaining certain securitised outcomes or following effects of securitising 'trigger events' is facilitated by treating securitisation as a social (causal) mechanism.

In Part II, moving from a sectoral to a regional level, we tried to problematise some important topics in academic, expert and policy discussion on the relationship between Europe/EU as an energy importer and its external environment. The opening Chap. 7 charted the challenges and European-level vulnerabilities, while Chap. 12 additionally deepened the analysis of these in the oil sector. Irina Kustova questioned the dominant assumption that liberalisation in the energy market necessarily translates to desecuritisation. An interpretive study of the way historical path dependencies, as well as dominant values and political discourses, shape the economic 'models' that seem to emerge, and why they clash, could be a fruitful avenue for further research. In their chapter, in turn, Jakub Godzimirski and Zuzanna Nowak interestingly show how internally designed outward governance through different instruments and external threats/risks can be mutually constitutive. These two chapters together provide a good reference to discussions about interdependence, its benefits and drawbacks. In a more postmodernist vein, this is again taken up by Paulina Landry, who launches a powerful critique of the negative security paradigm, which as she shows has until recently dominated EU gas sector governance.

Dag Harald Claes picks up on some of these topics, putting more emphasis on oil, a resource to which we pay, probably unwisely, very little attention in the book. He analyses in what way Europe needs to adjust and plan a common strategy on the global market. While this is an area which seems to be overshadowed by the Russian gas debate, getting less publicity and attention, we cannot forget that the degree of Europe's import dependence on oil is tremendous, while alternatives are still bleak. Whether the EU can act coherently in this area is not clear. Will we need to see a return to oil in energy security studies in Europe? Perhaps, though the growing importance of electricity in modern, post-industrial econo-

mies and the limited attention it receives in energy security studies has been a recurrent refrain of this volume. Furthermore, any analysis, even in political science and sociology, has to be informed by an adequate understanding of the energy system's materiality, and so, extend a hand to energy economists and technical energy engineering studies. Let this plea for interdisciplinary be my final thesis here.

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