



## **Contested seascapes**

Space-related Conflicts over Offshore Wind Farms in Scotland and Germany

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*Publication date:*  
2013

*Document Version*  
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

*Citation (APA):*  
Rudolph, D. P. (2013). *Contested seascapes: Space-related Conflicts over Offshore Wind Farms in Scotland and Germany*. University of Edinburgh.

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**- CONTESTED SEASCAPES -**

**Space-related Conflicts over Offshore Wind Farms in  
Scotland and Germany**

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**The University of Edinburgh**

**2013**

# Abstract

Offshore wind farms are widely considered to become a cornerstone of energy transition for securing energy supply and tackling climate change simultaneously. But recent developments have demonstrated that the siting of offshore wind farms is far from being conflict-free, evoking confrontations with a number of stakeholder interests. Such real-life evidence implies a *reductio ad absurdum*, as offshore wind farms are generally supposed to be less contested than the ones onshore and therefore more convenient for local communities.

By drawing on two case studies in Scotland and Germany (Argyll Array / Baltic 1), this thesis examines various conflicts that emerge from the siting of offshore wind farms and compares their underlying causes as well as their implications and institutional consideration in the planning process. In order to understand the conflicts over offshore wind farms, the research employs the epistemological framework of ‘space-related conflicts’ which turns the attention to conflicting interests, values and practices of affected actors as well as to the significance of structural and spatial conditions. Throughout the thesis, it will be argued that it is not the wind farms *per se* that are contested, but that the conflicts rather revolve around the places and spaces which are meant to be changed by the siting of offshore wind farms.

The findings show that both case studies reflect similar conflicts, where adverse impacts on coastal tourism and environmental impacts turned out to be the key issues for local opponents from the public. However, even though key controversies are comparable, major differences result from the rationales that opponents invoke to substantiate their concerns and more dominantly from the existing planning frameworks which pre-structure the power relations and dynamics of public engagement.

The comparative study concludes by suggesting some policy recommendations for future practices of dealing with affected actors. Therefore, the research findings do not just provide a contribution to the theoretical debates about the formation of resistance to renewables, but they also present practical implications relevant to policy-makers.

## **Declaration of Originality**

I hereby declare that the composition and content of this thesis is my own work and that it has not been submitted, in whole or in part, for any other qualification at this institution or any other.

David Rudolph  
2013

# Acknowledgements

Over the last four years numerous people helped and supported me in many ways that it would be hardly possible to do them all justice here, but some of them stand out for special thanks.

First of all, I extend my sincere gratitude to Claire Haggett, Heather Lovell and Simon Allen, my supervisors, whose individual and collective advice and encouragement have essentially contributed to the completion of this thesis. Their continual and inspiring support has been greatly appreciated.

The research for this thesis would not have been possible without the willingness and candour of each of the interviewees in Scotland and Germany. I am very grateful for their eager participation and sharing their thoughts with me.

I am most grateful for the support of my parents, Beate and Bernd Rudolph, and my family, who have generously provided the conditions over the last years, which have given me the opportunity to pursue my studies and research.

Cheers to my friends and fellow PhD students for inspiring discussions and for sharing this experience with me.

I would also like to gratefully acknowledge the funding support received from the Doctoral Network of the Global Environment and Society Academy and from the Centenary Research Fund of the University of Edinburgh.

# Contents

- Chapter 1:*        **Introduction and Literature Review**
- Chapter 2:*        **Theoretical Conception**
- Chapter 3:*        **Methodology**
- Chapter 4:*        **Empirical Evidence**
- Chapter 5:*        **The Object: Overview of conflicts over offshore wind farms**
- Chapter 6:*        **The Trigger: Affectedness**
- Chapter 7:*        **Counter-Discourse I: Tourism vs. Offshore Wind Farms**
- Chapter 8:*        **Counter-Discourse II: Environmental Impacts and Inner-ecological Conflict**
- Chapter 9:*        **The Arena: Planning Disputes – Uncertainty, Rationalisation and Power**
- Chapter 10:*       **Conclusions and Policy Implications**

## *Expanded content list*

Abstract.....	i
Declaration of Originality.....	ii
Acknowledgements.....	iii
Contents.....	iv
List of Tables.....	x
List of Figures.....	xi
List of Abbreviations and Acronyms.....	xii
<b>CHAPTER ONE: INTRODUCTION AND LITERATURE REVIEW.....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 Contested Offshore Wind Farms – A Literature Review.....	8
1.2.1 Underlying assumptions in research on wind farm siting controversies.....	8
1.2.2 Recurrent themes within offshore wind farm literature.....	15
1.2.3 Disregarded facets – Clashing interests and the spatial dimension.....	20
1.3 Research Objectives.....	24
<b>CHAPTER TWO: THEORETICAL CONCEPTION.....</b>	<b>27</b>
2.1 Necessity of a theoretical framework.....	27
2.2 Understanding and researching conflicts.....	28
2.2.1 An attempt to define conflicts.....	29
2.2.2 Conflicts in geographical research.....	31
2.3 Significance of the spatial dimension - From spatial to space-related conflicts.....	37
2.3.1 Conceptualisation of space in geography.....	39
<i>Substantial and material space</i> .....	39
<i>The social and the rest – relativistic and representational space</i> .....	40
2.3.2 Conflicts – From space to space-related practices.....	42
2.3.3 Strategic geographical imaginations.....	44
2.3.4 Summary – Spatial references in the conflict context.....	45
2.4 Knowledge, power and space in conflicts.....	47
2.4.1 Argumentative discourse analysis.....	50

2.4.2 Truth, rationalities and storylines.....	51
2.5 Conclusion – Thoughts on an outline of a space-sensitive discourse analysis to examine conflicts .....	53
<b>CHAPTER THREE: METHODOLOGY.....</b>	<b>55</b>
3.1 Research Perspective: Qualitative empirical research in Human Geography ...	55
3.1.1 Anticipated knowledge .....	57
3.1.2 Epistemological research direction .....	59
3.2 Methodological implementation .....	60
3.2.1 Comparison of case studies.....	61
3.2.2 Methods of data acquisition – tools of inquiry .....	64
<i>Documents</i> .....	67
<i>Qualitative Interviews</i> .....	69
3.2.3 Methods of data analysis.....	75
<i>Pre-organisation of material and transcriptions</i> .....	75
<i>Strategy of analysing storylines</i> .....	76
3.3 Limits of methodology .....	78
3.4 Experiences from the field, self-reflexivity and positionality .....	81
<b>CHAPTER FOUR: EMPIRICAL EVIDENCE .....</b>	<b>85</b>
4.1 The hegemonic discourse – Offshore wind farms in Scotland and Germany ...	85
4.1.1 Climate Change storyline.....	87
4.1.2 Ecological modernisation storyline.....	90
4.1.3 Physical conditions storyline in Scotland .....	92
4.1.4 Nuclear Phase-out storyline in Germany .....	92
4.1.5 The role of offshore wind farms in Germany and Scotland.....	94
4.2 Policy context and legislative frameworks .....	98
4.2.1 Planning in Scottish Territorial Waters.....	99
4.2.2 Planning in German Territorial Waters.....	100
4.3 Comparison of Planning Frameworks - Particularities and Constraints.....	102
4.4 <i>Case Study 1: Argyll Array Offshore Wind Farm</i> .....	104
4.4.1 Historical Context .....	105



4.4.2 Stakeholder Network – Interests, Argumentations and Actions .....	109
<i>Marine Scotland / Scottish Government</i> .....	111
<i>Tiree Community Development Trust (TCDT)</i> .....	112
<i>No Tiree Array action group (NTA)</i> .....	113
<i>Argyll Renewables Communities Consortium (ARC)</i> .....	116
<i>Scottish Natural Heritage (SNH)</i> .....	117
<i>Communities Against Turbines Scotland (CATS)</i> .....	118
<i>The Crown Estate</i> .....	119
4.4.3 Practices of resistance – action strategies of opponents .....	119
4.5 <i>Case Study 2: Baltic 1 Offshore Wind Farm</i> .....	123
4.5.1 Historical Context –The building of Mecklenburg-Vorpommern’s first offshore wind farm .....	123
4.5.2 Stakeholder Network – Interests, Argumentations and Actions .....	126
<i>Federal Country of Mecklenburg-Vorpommern – Planning Authority</i> . 130	
<i>Agency for Agriculture and Environment – Licensing Authority</i> .....	131
<i>Districts of Nordvorpommern and Rügen</i> .....	132
<i>Action Group ‘Don Quichotte’ and communities of Prerow and Zingst</i> 134	
<i>Tourism Association Fischland-Darß-Zingst</i> .....	136
<i>Bund für Umwelt und Naturschutz Deutschland (BUND)</i> .....	138
<i>Energie Baden-Württemberg (EnBW)</i> .....	140
<i>Other stakeholders</i> .....	141
4.5.3 Practices of resistance – action strategies of opponents .....	143

**CHAPTER FIVE: THE OBJECT - OVERVIEW OF CONFLICTS OVER OFFSHORE WIND**

**FARMS IN SCOTLAND AND GERMANY..... 147**

5.1 Conflict lines Argyll Array .....	147
5.1.1 Onshore impacts – change of structure and image of the island.....	147
5.1.2 Visual impacts – not only an aesthetic matter.....	153
5.1.3 Economic interests and tourism impacts – not only a local matter.....	155
5.1.4 Environmental conflicts .....	157
5.1.5 Argumentative patterns – opposing storylines and counter-discourses ...	159
5.2 Conflict lines Baltic 1 .....	161

5.2.1 Visual Impacts and tourism interests .....	161
5.2.2 Local environmental interests .....	162
5.2.3 Shipping route – ‘Kadetrinne’ .....	165
5.2.4 Argumentative patterns – opposing storylines and counter-discourses ...	166
<b>CHAPTER SIX: THE TRIGGER — AFFECTEDNESS.....</b>	<b>169</b>
6.1 Introduction.....	169
6.2 Is there a ‘backyard’ ... ?.....	169
6.3 ... or affectedness of stakeholders ? .....	175
6.4 Consideration of affectedness in planning.....	180
6.5 Affectedness and the role of spatial structures .....	184
<b>CHAPTER SEVEN: THE COUNTER-DISDISCOURSE I — TOURISM VS. OFFSHORE WIND FARMS.....</b>	<b>187</b>
7.1 Introduction.....	187
7.2 Tourism and wind farms: An ambiguous relationship .....	187
7.3 The tourism conflict: Underlying storylines.....	192
7.3.1 Visual impact storyline .....	192
7.3.2 Disruption of local character and identity.....	194
7.3.3 ‘Construction’ of tourists and visitors.....	196
7.3.4 Disturbance of recreational activities.....	198
7.3.5 Environmental impact storyline.....	199
7.4 Claims-making, uncertainties and existential fears .....	200
7.5 Consideration of tourism aspects in planning.....	204
7.6 Physical-material structures in the tourism conflict .....	207
7.7 Summary – a resurgent discourse of economic decline.....	209
<b>CHAPTER EIGHT: THE COUNTER-DISDISCOURSE II — ENVIRONMENTAL IMPACTS AND INNER-ECOLOGICAL CONFLICT .....</b>	<b>213</b>
8.1 Introduction.....	213
8.2 The environmental conflict – underlying storylines.....	213
8.2.1 Intervention with wildlife .....	214

8.2.2 Disruption of protected areas and habitats .....	215
8.2.3 Environmental hazards through ship collisions .....	216
8.3 Inner-ecological conflict between climate protection and nature conservation	217
8.3.1 Inner-ecological conflict and environmental organisations .....	220
8.3.2 Inner-ecological conflict and planning authorities .....	224
8.3.3 Expert knowledge, the public and missing advocates.....	227
8.4 Environmental aspects in planning: Uncertainties and compensation.....	231
8.5 Summary .....	234
<b><i>CHAPTER NINE: THE ARENA — PLANNING DISPUTES – UNCERTAINTY, RATIONALISATION AND POWER .....</i></b>	<b>237</b>
9.1 Introduction.....	237
9.2 Planning Controversies in Scotland and Germany .....	238
9.2.1 Jurisdictions over territorial waters and policies.....	239
9.2.2 Public engagement, affectedness and protests .....	243
9.3 Novel planning process for the sea: Knowledge and uncertainties .....	248
9.4 Technocratic planning regimes: Expertise and power .....	250
9.5 The emotional others? Significance of public engagement .....	255
9.6 Summary .....	262
<b><i>CHAPTER TEN: CONCLUSIONS AND POLICY IMPLICATIONS.....</i></b>	<b>265</b>
10.1 Review of findings and theoretical contributions .....	265
10.2 Practical implications.....	282
10.3 Theoretical re-interpretation and policy recommendations .....	288
10.4 Limitations and further research .....	294
10.5 Final comments .....	297
<b><i>LITERATURE .....</i></b>	<b>299</b>
<b><i>APPENDICES .....</i></b>	<b>321</b>

## List of Tables

Table 1: Synopsis of underlying research framework.....	24
Table 2: Interviews in Scotland and Germany.....	65
Table 3: Consulted documents (representations and consultation responses) .....	66
Table 4: Contextual summary of key stakeholders, Argyll Array .....	110
Table 5: Contextual summary of key stakeholders, Baltic 1 .....	128
Table 6: Summary of other stakeholders .....	142
Table 7: Summary of tourism conflict .....	211
Table 8: Summary of inner-ecological conflict .....	236
Table 9: Comparison of planning policies as employed to Argyll Array and Baltic 1 .....	239
Table 10: Comparison of public engagement of communities with specific focus on Argyll Array and Baltic 1. ....	247

## List of Figures

Figure 1: Trialectic of constitutive elements of space-related conflicts .....	34
Figure 2: Location of proposed Argyll Array .....	105
Figure 3: Initial potential layout of Argyll Array .....	107
Figure 4: Potential revised turbine layout of Argyll Array .....	109
Figure 5: Illustration.....	115
Figure 6: No Tiree Array banner.....	121
Figure 7: Timeline of planning events, Baltic 1 .....	125
Figure 8: Location of Baltic 1 offshore wind farm .....	126
Figure 9: Photomontage, .....	154
Figure 10: Exploitation of environmental qualities .....	158
Figure 11: Argumentative patterns and storylines of opponents .....	160
Figure 12: Argumentative patterns and storylines of opponents .....	166
Figure 13: “Crazy! Giant wind turbines in front of Timmendorf Beach” .....	202
Figure 14: Characterisation of public engagement .....	245
Figure 15: Interrelationship between offshore wind farms, space and local people	279

## List of Abbreviations and Acronyms

ARC	Argyll Renewables Communities Consortium
BImSchG	Bundes-Immissionsschutzgesetz (Federal Control of Pollution Act)
BSH	Bundesamt für Seeschifffahrt und Hydrographie (Federal Maritime and Hydrographyc Agency)
BUND	Bund für Umwelt und Naturschutz Germany (Friends of the Earth Germany)
BMU	Bundesamt für Umwelt, Naturschutz und Reaktorsicherheit (Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)
BMVBS	Bundesministerium für Verkehr, Bau und Stadtentwicklung (Federal Ministry of Transport, Building and Urban Development)
CATS	Communities Against Turbines Scotland
CEC	The Crown Estate Commissioners
EETC	Economy, Energy and Tourism Committee
EEG	Erneuerbare Energien Gesetz (Renewable Energy Act, Germany)
EIA	Environmental Impact Assessment
KOWAG	Kintyre Action Offshore Wind Farm Action Group
KWBN	Keep Wigtown Bay Natural
LEADER	Links Between Activities Developing the Rural Economy
MABL-MV	Ministerium für Arbeit, Bau und Landesentwicklung, Mecklenburg-Vorpommern (Ministry of Labour, Building and Regional Development)
MWAT-MV	Ministerium für Wirtschaft Arbeit und Tourismus, Mecklenburg-Vorpommern (Ministry of Economy, Labour and Tourism, Mecklenburg-Vorpommern)
NABU	Naturschutzbund Deutschland (Nature and Biodiversity Conservation Union)
nm	nautical miles (1.852km)
NTA	No Tiree Array
O&M	Operation and Maintenance
SEA	Strategic Environmental Assessment
SNH	Scottish Natural Heritage
SPR	ScottishPower Renewables

STALU / STAUN	Staatliches Landesamt für Landwirtschaft und Umwelt (Agency for Agriculture and Environment)
TCDT	Tiree Community Development Trust
TSG	The Scottish Government

# CHAPTER ONE: INTRODUCTION AND LITERATURE REVIEW

## 1.1 Introduction

*“The next generation of offshore wind turbines - designed to operate in deep water, not onshore wind turbines in a puddle - is absolutely critical in terms of mobilising the massive potential resource off Scotland's shores”.* (Scotland's First Minister Alex Salmond, Scottish Low Carbon Investment Conference, Opening Address, 27<sup>th</sup> Sept. 2011)

*“That future is incompatible with schemes to encircle our hills and our valleys with a ring of steel ... We are not a wind resource; this is our home and the background to and foundation of our lives and our future”* (CATS, Inquiry at Scottish Parliament, 25<sup>th</sup> April 2012)

On 20<sup>th</sup> January 2012, the Economy, Energy and Tourism Committee of the Scottish Parliament launched an official inquiry into the achievability of the Scottish Government's 2020 renewable targets, because a "vigorous, polarised public debate continues on the merits of certain renewable technologies, and on the siting of developments such as wind farms and biomass plants"<sup>1</sup>. The committee called for written evidence to be submitted by a broad range of contributors and held various meetings over the last year to take evidence from numerous stakeholders and experts. One particular question that was asked to be considered in submissions was: 'How can national priorities be reconciled with local interests?' Asking this question implies the existence of conflicting interests at the national and local level that impede the achievability of renewable energy targets in general as well as the siting of renewable energy facilities in particular. It is exactly this question that the following thesis on 'space-related conflicts over offshore wind farms' will implicitly address.

It is the vast and uncontrolled emissions of carbon dioxide from fossil fuels and the tremendous scientific consensus about the severe and all-transforming changes of the global climate and environment, as well as the ravenous societal drive for growth and energy that brought renewables onto the agenda. Wind farms, as one of the most advanced sources of renewable energy, are supposed to play a key role in tackling rapid climate change by reducing CO<sub>2</sub> emissions and to meet a steadily increasing

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<sup>1</sup> EETC Convenor Murdo Fraser, MSP: Renewable Energy Targets to be focus of Committee Inquiry. The Scottish Parliament. 20<sup>th</sup> January, 2012  
([http://www.scottish.parliament.uk/S4\\_EconomyEnergyandTourismCommittee/General%20Documents/Renewable\\_Call\\_for\\_Evidence\\_NR.pdf](http://www.scottish.parliament.uk/S4_EconomyEnergyandTourismCommittee/General%20Documents/Renewable_Call_for_Evidence_NR.pdf))



energy demand at the same time. For that reason many European countries are heavily promoting the establishment of offshore wind farms in order to increase the share of renewables within the compound production of energy. In both Scotland and Germany, energy from offshore wind farms is intended by decision-makers to become the cornerstone of the future energy mix and to bridge the gap emerging from the abandonment of fossil and nuclear energy sources. Offshore wind energy is acknowledged by decision-makers in both countries as a key solution to one of the most ground-breaking questions and matters of these days, both climate change and energy security.

But even if renewables are regarded as the more ecologically prudent option to generate energy, it is naïve to reckon that all forms of energy generation do not have impacts on the environment. Hence, it is less surprising that initial developments in both countries have witnessed that a straightforward and uncontested establishment of offshore wind farms is far from reality. Similar to wind farm proposals onshore, also the establishment of offshore energy landscapes has been decelerated by flaring contestations or even hindered by diverse forms of resistance at the local level.

This is because the expansion of decentralised renewable energy facilities brings a further boost to the re-shaping of postmodern energy landscapes (NADAI & VAN DER HORST 2010a). The appearance of decentralised renewables has made us again aware of where our ever-increasing energy demand is coming from. The shift towards centralised large nuclear and fossil-fuel power plants during the 20<sup>th</sup> century has detached the majority of people from the places of energy production. The emergence of renewables, particularly wind farms, at the end of the 20<sup>th</sup> century reversed the trend towards spatially diversified sites of energy production. But the steadily growing success of the consolidation of onshore wind farms, their accumulating spatial demand and increasing global pressures and threats of global warming induced another tendency towards the centralised large-scale use of renewables, particularly offshore wind farms. In many coastal countries offshore wind farms are widely expected to relieve the growing spatial burdens of onshore wind farming and to generate greater amounts of green energy more perpetually. This current turn is also expected to move the controversial sites of energy production again away from the centres where most people dwell in order to avoid continuously occurring confrontations with the local public.

However, this thesis presents a more contrasting and less amicable picture. It will be fundamentally argued that the siting of offshore wind farms does not comply with this picture drawn from policy-makers, and that offshore wind farms impose other and novel tensions and conflicts which do not make them appear less contested. The way in which the transition towards a society that builds its supply of energy entirely on renewables is organised will have profound implications for the society itself and the environment alike. As reflected by the need of the Scottish Parliament to hold a large national inquiry, the increased development of wind farms, onshore and offshore, persistently polarises the public debate, not just at the national level but mainly at the local level. Actors at the local level see themselves eminently confronted with the prospect of renewables, as this is where the national policies are implemented and where potential externalities materialise. It is the large economic efforts and societal upheaval as well as the localised manifestation of externalities of renewables that have provoked a clash about the meaningfulness of the way energy transition is performed, as reflected in the Scottish inquiry.

It is the localised contestation of the siting of renewables with which this research is concerned. Given the prominence and divisive nature of current debates, it is interesting to ask what it is about wind farms that prompts such controversies. The overarching objective of my research is to examine and compare particular conflicts that emerge from the siting of offshore wind farms in Scotland and Germany. More specifically, my research is concerned with the clashing interests of stakeholders involved in the planning of offshore wind farms that constitute conflicts, and the question of how these conflicts are addressed and negotiated in the existing planning systems. It also deals with the underlying motivations of actors who challenge proposed offshore wind farms and the meaning of spatial conditions in the conflict context. The broader goal is to shed light on the conflict dynamics in offshore wind farm planning in Scotland and Germany and to draw lessons for best or better practices. I employ case studies from Scotland and Germany because both countries have a similarly ambitious agenda for implementing offshore wind energy. “A comparative analysis is crucial in developing better theories and models for understanding facility siting processes and outcomes” (LESBIREL & SHAW 2000:9). Even if this research does not strive for the development of models, a comparative perspective is deemed to achieve a better understanding about siting controversies by

adding reference points and by relating conclusions and experiences to controversies in other national contexts. The merits and drawbacks of single cases may appear less forceful when being juxtaposed cross-nationally. Value in research is thus not just attained through the actual results but also through the comparison of the results. However, this overarching objective can be divided into more concise research questions:

***1) What conflicts emerge from moving wind farms offshore in Scotland and Germany and what are their underlying stimuli?***

Identifying and examining the conflicts over offshore wind farms requires the conflation of structural and action-related scales. Conflicts are understood as being motivated by clashing interests, which necessitates the consideration of interests, practices and concerns of involved stakeholders. Therefore, addressing this question draws on the stakeholder dialogue that surrounds the siting of wind farms. But conflicts are also informed by structural conditions in terms of the institutional setting. This issue necessitates an examination of the overarching discourses in which conflicts are embedded, what (counter)-discourses inform conflicting practices, and through which arguments and practices these discourses are (re-) produced.

***2) What capacity do the Scottish and German planning frameworks for offshore wind farms hold to address local conflicts?***

The stakeholder dialogue over the siting of wind farms is largely one of contestation and conflict. This contention between stakeholders takes place within the designated planning arena, which represents another structural side of the conflicts, as it pre-structures the engagement of certain actors and their action possibilities. The research is concerned with the comparison of how different conflicts are addressed within the different planning frameworks in Scotland and Germany. Juxtaposing the planning dynamics is deemed to elucidate the action opportunities that are allocated to each actor. Thus, addressing the capacity of the planning systems in place also involves aspects of public participation. Explicitly looking at the institutional implementation of offshore wind farms at the local level is intended to explore the forum of infrastructure planning as another conflict-shaping component.

**3) *What meaning of the spatial conditions attached by conflicting actors is revealed in the conflict context?***

Explicitly exploring ‘space’ is expected to gain a deeper insight into the formation of opposition to renewables and to condense earlier inconsistent research efforts to incorporate the spatial dimension into the renewables debate. Repeatedly questioning how space is constructed and what meaning is ascribed to spatial conditions, this research follows a constructionist and non-determinist path towards the conception of space that takes form through the conflict-related negotiation of space-related interests. Although examining the meaning of ‘space’ is an essential element of this thesis, there is no individual chapter dedicated to answer this question. Various implications of the ‘constructed physical-material conditions’ in the conflict context are rather illuminated within the elaborations on particular conflict dimensions in order to elucidate the conflict-internal interplay of ‘space’, interests and argumentations.

By addressing these questions, I fundamentally argue that the predominant conflicts emerging from the siting of offshore wind farms are not about the wind farms *per se*. The conflicts rather revolve around the spaces and places which are variously changed by the siting of wind farms and the feared implications of such changes for the people inhabiting these places. So, the variously constructed spaces, places and seascapes are contested and not the wind turbines themselves. In contrast to onshore wind farms which may directly impact on people through noise and shadow flicker, there is no clear direct relationship between offshore wind turbines and people. The conflicting relationship between them is only produced through feared repercussions for the space-related practices of people caused by the changes of ‘spaces’. It is the claimed place-shaping capacity of wind farms that induces controversies. More specifically with regard to offshore wind farms, it is claims-making based on the uncertainties about detrimental onshore effects and environmental impacts, which constitutes key conflicts. In this regard, I argue that prevailing technocratic planning regimes in Germany are less suitable to fully ascertain all issues, whereas the Scottish planning efforts seem more adequate to incorporate socio-economic impacts.

## *Outline of thesis*

Following this outline, the *next sections* provide an overview of previous research on wind farm controversies, particularly focusing on underlying assumptions that have pervaded the wind farm literature as well as on recurrent themes within the literature on offshore wind farms. The overview ends by identifying and outlining gaps within previous research. Based on the identified gaps, *Chapter Two* serves to set out and explain the theoretical basis on which the research is grounded. The purpose of this chapter is to develop the epistemic notion of space-related conflicts and to theorise a concept of space that can be profitably utilized for the examination of space-related conflicts over offshore wind farms. *Chapter Three* sets out the methodological conceptions and discusses the methods that have been used to gather and analyse empirical data. Due to the comparative orientation and epistemological direction, a flexible qualitative research design was chosen. The chapter serves to describe and justify the applied approaches in detail and critically reflects upon encountered problems and research-practical experiences.

In order to move away from the theoretical and methodological reflections on this research, the empirical *Chapter Four* provides contextual information about the two case studies. The hegemonic discourse that frames the offshore wind energy policies in Scotland and Germany is deconstructed and the planning framework for wind farms offshore is described first. The chapter turns then towards the description of the case studies. In doing so, detailed information is provided on the key stakeholders, their interests in and concerns about the wind farm projects. Each section closes by synthesising practices of resistance of key stakeholders for each case study.

In the analytical *Chapters Five to Nine*, the threads of the preceding descriptive sections of Chapter Four are picked up and transferred into an analysis and comparison of particularly salient facets of conflicts over offshore wind farms in more detail.

The analytical *Chapter Five* provides an overview of the central conflict lines that were identified for both case studies. It focuses on the analysis of the divergent

interests, motives and storylines that are invoked by affected stakeholders and that construct particular conflict lines. This first analytical chapter serves to establish the link between the preceding empirical descriptions of Chapter Four with the more analytical explorations that follow in subsequent chapters.

*Chapter Six* shows that NIMBY (not-in-my-backyard) thinking is still a prevalent interpretation of opposition in the planning of offshore wind farms. But it also adds some new ideas to support the academic opinion that NIMBYism is rather imprecise and valueless in explaining opposition. The attention is therefore turned to ‘affectedness’ of stakeholders which is proposed as a more appropriate concept to consider oppositional activities and to delineate participation in planning.

The following *Chapter Seven* is concerned with the tourism conflict representing the first prevalent counter-discourse. It elucidates that the tourism conflict is grounded on various storylines of how the wind farms are supposed to negatively impinge on the vital tourism industry. In doing so, it is demonstrated that this conflict reflects the central issue for coastal communities as it relates to the disruption of space-related practices ensuring economic security. In contrast to common assumptions, it is critically argued that this dispute is essentially constituted through conflicting claims-making by different stakeholders, as there is no real evidence and truth for either of both contradictory stances.

*Chapter Eight* focuses on environmental conflicts that constitute the second essential counter-discourse against offshore wind farms. This chapter elaborates on local environmental impacts of offshore wind farms that are in direct contravention to the desired global assets of renewables. By reflecting upon the facets of the so-called inner-ecological conflict, it is argued that a discursive break within the alleged inner-ecological consensus is essentially related to the questions of where and how offshore wind farms should be built.

By comparing the planning disputes and the difficulties with which decision-makers are confronted, *Chapter Nine* turns the attention to the structural level of conflicts. The chapter shows that offshore wind farms are a novel planning object which requires a modification of existing planning procedures and relevant knowledge, as both cause uncertainties and constrain the manner how offshore wind farms are dealt

with. Finally, this chapter is concerned with the methods of public engagement in the planning processes in Scotland and Germany which substantially differ from each other.

The final *Chapter Ten* summarises and discusses key outcomes of this research. It is divided in three parts which present theoretical and practical contributions and policy recommendations in order to underline again the relevance of this research for academic debates as well as for real-life issues. Therefore, my thesis closes by attempting to translate critical results into suggestions for policy-makers.

## **1.2 Contested Offshore Wind Farms – A Literature Review**

This chapter will discuss and summarise the key themes and issues that have been raised in the literature relating to the contested establishment of wind farms, both onshore and offshore. It will first outline the key assumptions underpinning the research on opposition to wind farms and move on to re-evaluate central themes that have been introduced to make greater sense of and understand controversies over the siting of offshore wind farms. In summary, this chapter aims to highlight the need of a change of perspective. It is suggested that a perspective shifted towards conflicts provides additional insights into facets of wind farm controversies which have been largely disregarded or have not explicitly been reviewed.

### **1.2.1 Underlying assumptions in research on wind farm siting controversies**

With the emerging political need to propel the siting of renewables, there has been a growing and increasingly diffuse number of studies dealing with the origins and causes of the formation of opposition to wind farm developments. The vast majority of studies have been attempting to shed light on and to make sense of the persistent hostile reactions to wind farm projects at the local level. In doing so, most literature concerned with the conflicting and controversial siting of onshore wind energy takes public opposition and its underlying factors as a basis and mostly attempts to give explanations for the resistance by drawing on different approaches. These approaches will now be examined in more detail in order to illustrate how wind farm conflicts have been addressed and what implications this has had for the investigation of offshore wind farms.

### ***Social Acceptance - the social gap and social barriers***

The fundamental assumption underlying and justifying the majority of research on opposition to wind energy is the prevailing supposition that opposition to wind energy exists and that this opposition is detrimental to the much-needed transition of the energy sector and a risk to a successful combat against climate change. This has always been justified by a general support of renewable energy and frequent emergence of resistance when it comes to siting projects, pointing towards a lack of acceptance at the local level. This phenomenon has widely been paraphrased as the “social gap” (BELL et al. 2005, 2013) or framed as “social barriers” (AGTERBOSCH et al. 2007, PASQUALETTI 2011a, 2012). The vast majority of studies aimed to explore the social gap and public attitudes, as well as to identify the social barriers and give reasons for the formation of local opposition. In doing so, the notion of social acceptance of wind farms and wind energy landscapes has been introduced as a common ground for launching research on various factors that shape social acceptance. Examining social acceptance is supposed to fill the “social gap” and to overcome “social barriers”. The goal to overcome opposition as a social barrier has often been implicitly conveyed in wind farm research, which implies that opponents are basically wrong and uninformed and have to be proselytised (AITKEN 2010a). But this premise has been gradually abandoned in favour of enhancing the understanding of opposition and engaging with objectors, rather than discrediting them. However, the idea of social acceptance itself as the starting point for research has lately been contemplated more critically, too. Acceptance of infrastructure facilities is very complex and dynamic, it involves various actors and a part of case-specific processes that cannot be easily generalised and explained by particular factors or rules (WOLSINK 2012). Similarly, BATEL et al. (2013), argue that a focus on acceptance only aims at increasing acceptance amongst the public and ignores other empirical relations and responses to wind farms beyond the two contrasting poles of acceptance and opposition, such as uncertainty and apathy. A more critical contemplation of the term acceptance may also offer a more nuanced view on the range of public attitudes and responses to wind farms.

WARREN & BIRNIE (2009:121) have come to the fundamental conclusion that the “wind farm debate consists of divergent values, not disputed facts” and is therefore



elusive and a “need to broaden and deepen our understanding of the factors shaping public attitudes” is crucial. Similarly, HAGGETT & FUTAK-CAMPBELL (2011) conclude that claims-making and counter claims-making constitutes the local debates about wind farms. Given all these ideas of how to address objections to the siting of renewables, HAGGETT (2010) provides an overview of the factors that should be considered when investigating obstacles in wind farm planning. This includes factors of the local context, considerations of local and global priorities, the meaning of control and ownership and the various relationships between local people and decision-makers being significant for the understanding of public support or opposition.

### ***The power of opponents***

The social gap is supposed to be reflected in low rates of successful wind farm planning applications which points to a powerful opposition that is able to prevent the construction of wind farms. This means that local actors have a strong influence on planning outcomes (SWOFFORD & SLATTERY 2010), representing a ‘social barrier’ to wind energy developments. Although the power of local opponents has recently been challenged (AITKEN et al. 2008; WALDO 2012), others come to the conclusion that this cannot be generalised (BELL et al. 2013), as power relations are case-specific depending on local characteristics and the social context of opposing communities (VAN DER HORST & TOKE 2010). However, power relations in local politics involving a number of different stakeholders have been widely cited as a decisive element in wind farm planning disputes.

### ***Public attitudes and the futile NIMBY concept***

A common idea said to represent public attitudes and describe public opposition to sensitive infrastructure projects is the “NIMBY” (not-in-my-backyard) concept, i.e. that wind farms are only opposed by local people when they are confronted with projects in their vicinity. This concept is particularly being reiterated in the public discourse about wind energy. But previous literature has also argued that opposition to onshore wind farms cannot simply be explained by this NIMBY concept, which has therefore been widely criticised and refuted (BURNINGHAM et al. 2006, DEVINE-WRIGHT 2009a, VAN DER HORST 2007, WARREN et al 2005, WOLSINK 2000, 2012). Providing a synthesis of research conducted so far, BELL et al. (2005, 2013) argue for

a deeper and subtler understanding of a “social gap” to explain the strong public support of wind energy and its less successful practical realisation. They (BELL et al. 2013) conclude that the social gap is constituted by opponents of various attitude types, such as place-protectors, qualified supporters and unqualified opponents. Similarly, other authors emphasize certain limitations of the NIMBY concept and give other explanations for the barriers of wind farm siting. The attribution of NIMBYism should be avoided, as it takes the geographical proximity for granted and does not scrutinize the cause and underlying motivations of opposition to wind farms. The NIMBY argument is even meant to obscure “real motives and impedes our understanding of what is really happening in facility siting conflicts” (WOLSINK 2006:90). Therefore, simplistic accusations of self-interest do not provide any explanatory value to the formation of opposition and only stigmatise opponents as irrational, selfish and unqualified (DEVINE-WRIGHT 2009a). In contrast, a greater acceptance of wind energy has been observed with increasing proximity to wind energy facilities in Scotland and Ireland (WARREN et al. 2005), which implies an inversion of the NIMBY concept. In order to avoid the limited simplification of NIMBY description, several other explications have been provided to address obstacles of wind energy facilities. There have been two general explanatory pathways in the emerging literature on public attitudes towards the siting of energy infrastructures. The first addresses particular project-specific and structural aspects, and the second pathway emphasises the locations where projects are proposed and their place-related meanings (DEVINE-WRIGHT 2013a).

### ***The significance of structural conditions – participation, ownership, trust and fairness***

The notion of social acceptance (WÜSTENHAGEN et al. 2007) or local acceptance (JOBERT et al. 2007) is widely used to explain opposition to wind energy by mostly focusing on the socio-political frameworks. While conceptualizing social acceptance WÜSTENHAGEN et al. (2007) distinguish between three different dimensions, in particular socio-political acceptance, community acceptance and market acceptance. Socio-political and community acceptance refer to contradictions between wide public support for renewable energy and the problematic execution on site, and therefore comprises aspects of the local context, public attitudes and perceptions, as well as decision-making, policy and planning regulations. The dimension of market acceptance includes economic implications of wind energy such as financial

incentives and outcomes which may determine the realisation of renewables. Similar to these ideas, essential factors that may influence local acceptance of wind energy are examined by JOBERT et al. (2007) in several case studies in Germany and France. These factors can be divided into two categories, namely institutional conditions which contain policy and regulatory settings, and territorial factors, such as the choice of site including local physical and social conditions. WONG (2010) also highlights dynamic regulatory frameworks to be influential on the outcome of wind farm developments, rather than the actual market-based or state-based policies. In particular, WOLSINK (2000, 2007a, 2007b, 2011) strongly emphasises the importance of structural constraints for shaping local and public attitudes, such as fair public involvement in the planning process. The meaning of adequate and equal opportunities to participate in the decision-making process has often been highlighted as a crucial factor for a legitimate planning process and successful planning outcomes (HAGGETT 2011b, DEVINE-WRIGHT 2011a). From a reverse angle, the realisation of the planning system becomes a social barrier for wind energy, too. As NADAÏ (2012) points out, the technological potential of wind energy is always socially situated and stands and falls with the quality of its planning process.

Participatory schemes have become the central stage on which most public actors voice their concerns and objections and through which they can be heard by planning authorities. Therefore, research so far has asked the questions of how the public is constituted and imagined in the planning process (WALKER et al. 2010, WOLSINK 2011) and to what extent public concerns, knowledge and practices have been actively considered (AITKEN 2009). Planning procedures are supposed to structure the relevant knowledge that is allowed to contribute to the debate and also separates the weighting of lay and expert knowledge (AITKEN 2009). In this context, mutual trust between different stakeholders and procedural justice established through the decision-making process is often cited as a pivotal element leading to prudent and consensus-oriented wind farm planning and counteracting hostilities (GROSS 2007, WOLSINK 2012, HALL et al. 2013).

Not only is the participation of local communities in planning meant to have an effect upon the dynamics of acceptance, but so are the ownership of wind farms (WALKER 2008) and the benefits for host communities (CASS et al. 2010, AITKEN 2010b). Within a study located in Scotland, community ownership of a wind farm

could be verified as an essential factor for the acceptance of wind farms (WARREN & MCFADYEN 2010). Others (COWELL et al. 2011) challenge the dominant community benefits rationale as merely compensation for impacts without clear acceptance-changing virtues.

In summary, these notions encompass socio-political and regulatory conditions that may have an influence on and shape acceptance of wind farms. The specific constellation of stakeholders and the interactions between the authorities, wind energy developers and oppositional actors within a certain socio-specific setting all influence the establishment of wind farms. It is even argued that institutional conditions and constraints (WOLSINK 2000, AGTERBOSCH et al. 2009) within the prevailing planning system (AITKEN et al. 2008) are more determining for a successful deployment of renewable energy facilities than local support or opposition.

### ***The significance of place***

A second general approach to explore wind farm disputes is concerned with the social meaning of territorial conditions that is theoretically linked up with attributions to and values of landscape. Even if it is difficult to identify a common cause of oppositions to wind farm landscapes, PASQUALETTI (2011b) highlights the capacity of wind farms to reshape landscapes and thus to disrupt the ties between landscapes, places and people who occupy them. In order to add more detail, DEVINE-WRIGHT (2009a, 2011b) broke new ground by looking at the significance of place attachments instead of concepts of sites and backyards. This concept takes an important step forward by drawing upon “symbolic and affective aspects of place-related action” (DEVINE-WRIGHT 2009a:426). The concept of place is introduced to exhibit physical aspects of specific locations and their various symbolic meanings for individuals or groups. This allows a consideration of the significance of the locational or spatial context within social phenomena. In detail, DEVINE-WRIGHT (2009a, 2011a) includes psychological approaches like place attachment, place identity and place disruption to discover the different subjective meanings of place in the context of opposition to renewable energy. Whilst place attachment is understood as a product of a positive and emotional connection with familiar locations, place identity refers to the construction of symbolic attributes to locations that are ascribed by individuals and thus create certain identities and attitudes. However, place

disruption describes potential alterations to the physical and even social aspects and might also threaten preexisting place attachments and identities, which may lead to specific behaviour or actions to cope with these disruptions. Therefore, local opposition is reconceived as a place-protective response to potential local changes going hand in hand with the implementation of renewable energy facilities, which involves certain types of social representations (DEVINE-WRIGHT 2009a). This proposed framework provides a fruitful way to look at the socially constructed meaning of locations and to capture social and contextual aspects for the shaping of local resistance (DEVINE-WRIGHT 2011a). Different social representations of nature and landscape for shaping attitudes and argumentations in conflicts over wind farms have been similarly presented by WOODS (2003). Additionally, he also raises some fundamental statements regarding scale and environmental issues of wind farm conflicts, arguing that the conflict lines cannot simply be divided into dichotomous local and global interests, as well as that environmental concern is prevalent on both sides of the conflict.

### ***The significance of subjectivities***

Besides the structural conditions and the spatial context, a third recurring theme in the exploration of the social gap pursues the broad spectrum of subjective values and concerns, which are intertwined with the two former aspects. Subjective valuations, perceptions and expectations are deemed to motivate oppositional activities of wind farms essentially and comprise valuations of wind energy per se, the characteristics of wind turbines, as well as the planning regimes (WALKER et al. 2011). PASQUALETTI (2012) identifies aesthetic, technical, environmental and socio-cultural concerns related to potential impacts of wind farms as key barriers to wind farms. In addition, HAGGETT (2012) stresses the experience of noise nuisance emanating from wind farms as a *hitherto* underestimated and hard to measure impact. Also, environmental controversies, inherent in wind farm disputes, are based on diverging perceptions, constructions and preferences of local and global environmental impacts and protection, which is referred to as the “‘green on green’ dimension of wind energy controversy” (WARREN et al. 2005:854).

In summary, a commonality emerging in all approaches and all themes is the significance of the variably perceived local setting and the structural conditions that both inform acceptance and the formation of opposition. Thus, spatial considerations

as well as socio-political conditions should be regarded when analysing the formation of opposition to wind farms.

### **1.2.2 Recurrent themes within offshore wind farm literature**

Previous examinations of wind farm siting controversies have shown the shortcomings and deficits of NIMBYism<sup>2</sup> and the significance of structural conditions as well as subjective valuations and rationales. Consequently, it is assumed that offshore controversies must indicate some content-related intersections with onshore wind farms, but also encounter new and offshore-specific conflict dimensions (HAGGETT 2008). Given the underlying assumptions and previous directions taken in the wind energy literature, the “social gap” must become even more vexing in the context of conflicts over offshore wind farms. General expectations share the common idea that offshore wind farms are less controversial and face a higher social acceptance than the ones onshore. This hope seems to be naïvely inferred from the NIMBY concept, assuming that an offshore location will be more tolerable due to the increased spatial distance from people’s ‘backyards’ (DEVINE-WRIGHT 2012). But the “social gap” between the general high rates of acceptance of wind farms and local protests does not disappear just because wind farms are moved further away offshore. In one of the first synopses focusing on issues of offshore wind farms, HAGGETT (2008) already suggests that moving wind farms offshore is unlikely to evade all the problems wind farms encounter onshore, and that novel issues may supervene. Even if wind farms are moved to another terrain, this does not mean that they are “out of sight out of mind” (HAGGETT 2011a:505). Thus, physical proximity is an impractical measure for determining acceptance towards offshore developments (DEVINE-WRIGHT 2012). Central aspects of the research on wind farms regarding the effects of the planning and regulatory framework as well as impediments caused by public resistance can be found in the context of offshore wind farms again. While the research body on the political and planning-related contextualisation of and attitudes towards offshore wind energy is currently increasing, just a few studies have turned the attention to local socio-political issues so far and have yet to fully explore the conditions of conflicts over the siting of offshore wind farms.

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<sup>2</sup> NIMBYism in the context of offshore wind farms will be revisited in the analytical Chapter Six.

### ***The significance of the planning context and public participation***

Even if offshore wind farms are not situated in the vicinity of or within the administrative boundaries of communities, planning constraints and public participation have still been identified as influential factors for their acceptance. The consequences for spatial planning of wind energy facilities in a new terrain have been highlighted by JAY (2008, 2010, 2012a). He emphasizes the importance of integrated spatial planning which has been undermined in the marine sector. The integration of spatial planning, “as a decision-making process for influencing or determining the way in which physical space is used” (JAY 2010:495), is considered to make important contributions to the development of offshore wind energy within a balanced process with other marine demands. Similarly, KANNEN (2005) has previously argued for the need of an integrated assessment in order to ensure an economical, ecological and socio-political establishment of wind farms and to legitimise decisions between other coastal activities at various levels. A more broadly structured study by PORTMAN et al. (2009) has focused on general policy drivers and impediments by comparing offshore wind developments in Germany and the United States. Several categories have been identified, which represent the most important factors for a successful development of offshore wind facilities. These include the regulatory framework, the role of the public and economic aspects. A similar holistic perspective is provided by O’KEEFE & HAGGETT (2012) who have explored issues that are likely to have an effect on the development of an offshore wind farm project in Scotland, such as economic viability, grid constraints and also public acceptability, although the stakeholders they interviewed did not believe the latter issue would be a barrier to development.

However, public involvement still plays a key role in the implementation of offshore wind farms. Another study conducted by PORTMAN (2009) highlights the role of public involvement in decision-making processes, which becomes important again because of the challenging interests, new land uses and the complex regulatory mechanisms regarding coastal zones and the marine area. The implications of the changing spectrum of stakeholders have been widely acknowledged (e.g. MAUTZ 2010). The offshore and coastal area is claimed by other stakeholders than the terrestrial area, but with no less contrasting interests (POMEROY & DOUVERE 2008, DEGNBOL & WILSON 2008). So, issues of participation in planning does not only concern the wider public, but also new and different stakeholders specific to the

offshore area, most obviously fishers and shipping (GRAY et al. 2005; BERKENHAGEN et al. 2010, O'KEEFE & HAGGETT 2012).

The interests, values and attitudes of various stakeholders are highly situation-specific and also depend on the characteristics of the project (WALKER et al. 2011). TODT et al. (2011) point to the importance of the context of the individual case. They describe the resistance to an offshore wind proposal off Andalucía as contextual, as opponents challenged the site and criticised the lack of a clear and transparent regulatory framework and the consideration of local knowledge. As opposed to the planning of onshore wind farms, the “weakness of public involvement remains a possible explanation for the success of marine wind energy in the UK”, as presumed by JAY (2012a:86). FIRESTONE (2011:242-243) even surmises ‘national governments have become more accustomed to public objections, comfortable with opposition, and savvy at addressing the public’s concern’s” and “may have simply assumed a larger role in decision-making at the expense of local control”. Public participation as a source of delay can therefore be challenged (WOOLLEY 2010). But WOOLLEY (2010:249) also suggests that more innovative and deliberative planning approaches for offshore wind energy “would reduce the scope for planning decisions to be delayed by public opposition”. Similarly, developers’ efforts to engage communities from early planning is a valuable opportunity to create an open and dynamic process and to gain confidence for offshore projects (SOERENSEN et al. 2001) and to avoid a perceived unfairness and deficiency of planning (KEMPTON et al. 2005). With regard to large offshore wind developments, DEVINE-WRIGHT (2012) acknowledges the increasing significance of community benefits and intermediaries negotiating between developers and affected communities. In summary, the turn towards offshore wind farms is therefore also shaped by expectations and experiences of communities towards engagement decisions as they are “contextualised by preceding debates and experiences of onshore wind” (WALKER et al. 2011:10).

### ***Coastal tourism and the significance of visual disamenity and prior experience***

Further aspects that have been frequently highlighted with regard to offshore wind farms are the implications of visual modifications to the coastal view as well as, in some way, the significance of spatial conditions in terms of actual distances between the shore and the turbines. The general point of departure is that “offshore wind



farms that can be seen from the coast generate visual disamenities, and accordingly reduce the welfare of people” (LADENBURG & LUTZEYER 2012). Visual impacts have been the key concern about an offshore wind farm proposal in the US coastal waters (KEMPTON et al. 2005). In more detail, distance and atmospheric effects influencing the contrast have been found to have the biggest visually perceived impact (BISHOP & MILLER 2007). The visual impact is meant to be rooted between the recreational use of the coast and the distance of wind farms from the coast. Therefore, a consistent balance between these factors has to be considered to find an optimal location (LADENBURG & DUBGAARD 2009). In particular, LADENBURG (2009, 2010) provides further explanations, mostly based on statistical models and quantifiable data, to describe the formation of resisting attitudes to offshore wind farms. Therefore, he establishes a relation between the frequency of beach visits and the formation of attitudes to wind farms (LADENBURG 2010), and stresses the influence of prior experience with offshore wind farms on the perception of visual impacts (LADENBURG 2009) and distance to and size of the nearest offshore wind farm (LADENBURG & MÖLLER 2012) as attitude-shaping factors.

Besides the well-being of local residents, visual disamenities are particularly associated with coastal tourism. “The view from the coast out towards the horizon is as much a part of experiencing the coast as any physical characteristics of the shoreline itself, and an attractive aspect of living or visiting there” (DEVINE-WRIGHT 2012:196). The visual damage of the seascape remains a key concern for offshore wind energy as many wind farms are still proposed near-shore (WOLSINK 2010). The visual modification of the seascape is supposed to have far-reaching and adverse repercussions on the socio-economic setting at the coast, in particular on the tourism economy (BYZIO et al. 2005, MAUTZ 2005). Although often reiterated, the actual effect of wind farms on coastal tourism remains rather ambivalent due to insufficient evidence (DEVINE-WRIGHT 2009b, LILLEY et al. 2010, FIRESTONE et al. 2009).<sup>3</sup>

### ***The significance of place and seascape***

The theoretical approach of place attachment and place disruption has gained a particularly prominent position in research over offshore wind farm siting disputes. The notion of disrupted places through offshore wind farms expands pure visual

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<sup>3</sup> The effects on tourism will be revisited in more detail in Chapter Seven.

disruption themes and puts them on more epistemological grounds. Similar to the exploration of opposition to onshore wind farms, it has recently been applied to an offshore wind farm controversy in Wales (DEVINE-WRIGHT 2009b, DEVINE-WRIGHT & HOWES 2010). The implementation of wind farms has been explained by a disruption of attachments to places, which also implies a threat to people's place identity. Negative attitudes to wind farms leading to opposition are caused by disturbances of symbolic meanings attached to places by coastal residents and visitors. So this fruitful framework seeks to link social representations of coastal and offshore areas with renewable energy projects. Similarly, seascape values have been identified to strongly determine local attitudes towards offshore wind developments in the German North Sea (GEE 2010). This example demonstrates empirically that local attitudes and values rest upon local identity, symbolic ascriptions to the sea and perceptions of renewable energy and climate change. GEE (2010) states that the symbolic significance of the sea in shaping attitudes is not only missing in the research debate of offshore wind farms but also in the planning and decision-making process. Spatial representations emerge with the increased deployment of renewables offshore and can manifest to detain wind farm projects, as WOLSINK (2010) also documented with a Dutch case study. However, those examples indicate that a differentiated importance is to be attached to the spatial context of offshore projects, too.

To conclude, in association with the changing institutional setting and stakeholder configurations, new controversies over offshore wind farms seem to be emerging, which has initially been proven (e.g. BISHOP & MILLER 2007, FIRESTONE & KEMPTON 2007, WOLSINK 2010). These studies mostly draw upon social and perception-related descriptions in order to explain antagonistic positions to offshore wind farms, rather than concentrating on the institutional framework. FIRESTONE & KEMPTON (2007) narrow key concerns down to environmental impacts, aesthetic issues and related impacts on recreation and the fishing industry. An extensive meta-exploration of conflicts over offshore wind farms has been conducted by BYZIO et al. (2005) focusing on institutional as well as subjective particularities in order to point to wider opportunities and obstacles of the utilization and institutionalization of offshore wind farms in the German North Sea. In doing so, BYZIO et al. (2005) highlight a so-called 'inner-ecological conflict' inherent in siting disputes over

renewables.<sup>4</sup> However, different factors and features are required in order to explain these controversies. Hence, there have been several approaches to investigate the opposition to offshore wind farms, which are often based upon the understanding of the formation of attitudes and opinions (e.g., FIRESTONE & KEMPTON 2007, LADENBURG 2010, HAGGETT 2011a). This strategy can be seen as akin to the notion of social acceptance.

### **1.2.3 Disregarded facets – Clashing interests and the spatial dimension**

Due to the large and ever-expanding amount of literature dealing with obstacles to the siting of wind farms, this review does not claim to cover all aspects of this topic and therefore cannot be conceived as complete. But the most important and frequent facets should be clarified, since general ideas and notions recur in different contexts. The causalities with which the impediments of the siting of offshore wind farms have been addressed and explained so far can be narrowed down to two recurring issues, which have typically been considered separately. On the one hand, the institutional and regulatory framework, in which the development of wind farms is embedded, impinges on the establishment of wind farms, both offshore and onshore. Those structural conditions refer to the power relations of involved stakeholders, the provision of participatory opportunities and the significance of ownership and fairness. On the other hand, subject-related and perceptive factors in shaping attitudes towards wind farms have also been highlighted as a central motivation for preventative activities against wind farms. As numerous previous studies have demonstrated, both aspects are represented as key causes for obstacles to offshore wind farms alike, although they have rarely been considered in a mutual manner. Studies on offshore wind farms are based on a rather quantitative methodology (e.g. LADENBURG 2009, 2010). This is indeed helpful when being interested in a huge number of respondents or in the frequency of opposing arguments. But in order to cover subjective contents and to obtain detailed nexuses of particular arguments such an approach must be regarded as less adequate. More qualitatively oriented studies are deemed more fruitful and coherent to inquire into the constitutive elements of the conflict context, as partially achieved by ZOGRAFOS & MARTINEZ-ALIER (2009) for onshore wind farms and GEE (2010), DEVINE-WRIGHT & HOWES (2010) and ELLIS et

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<sup>4</sup> This ‘inner-ecological conflict’ can be equated with the idea of ‘green on green’ dimension of wind farm controversies (WARREN et al. 2005). This environment-related conflict dimension will be revisited in the analytical Chapter Eight.

al. (2007) regarding offshore wind farms. Despite the expanding substance of research on wind farm siting controversies, there are a few vague features in the existing literature this research seeks to address more explicitly.

*Firstly* and interestingly, although the term ‘conflict’ can be repeatedly traced in wind farm literature over the past years (JESSUP 2010; TODT ET AL. 2010, HAGGETT & TOKE 2006, GROSS 2007, ELLIS ET AL. 2007, SZARKA 2004, VAN DER HORST & VERMEYLEN 2011), this term has hardly been explicitly utilised as the epistemological reference point during the multi-faceted engagement with the siting issue of (offshore) wind farms. Conflicts have often been mentioned as an overarching headword to address the contestation of wind farms and their social acceptance, but have rarely been clearly conceptualised as such, as the source of contestation and object of inquiry. Only VAN DER HORST & VERMEYLEN (2012:430) explicitly outline landscape-energy conflicts as resource conflicts based on different claims within a particular geographical area, which appear as conflicts “about the space in which the resource extraction is taking place.” Another exception are the explanations for wind farm opposition by BYZIO et al. (2005) and MAUTZ (2010) who both provide summaries of new conflict constellations that may occur through offshore wind farms. BARRY & ELLIS (2011:32) argue that opposition to wind farms is often “very deep-seated and usually based on place-specific and cultural arguments” which, alongside an insensitive handling of opposition, creates two obdurately opposing blocs, that obscure a more nuanced and “pluralistic array of objector positions ranked on a continuum from outright rejection to uncritical acceptance”. This circumstance of diametrically opposed stances is supposed to render the common consensus-seeking process unrealistic and idealistic (BARRY & ELLIS 2011). However, looking explicitly at and deconstructing underlying conflict dynamics can help understand these nuances and different positions shaping the compound of oppositional views, as initially proven by WOODS (2003), JESSUP (2010) and ZOGRAFOS & MARTINEZ-ALLIER (2009), although the “types and levels of conflict in relation to wind farms make the pursuit of consensus unrealistic” (BARRY & ELLIS 2011:32). This implies that conflicts over wind farms are multi-layered and complex.

Consequently, PEPERMANS & LOOTS (2013) meaningfully argued that onshore wind turbines generate multiple conflicts over interests, meanings and values. Yet, they

simplify that “wind farm disputes should be seen as conflicts between actors who frame their interest as the conservation of a landscape which is threatened by the local, tangible impacts of wind turbines and actors who frame the issue by stressing the global, imperceptible and fundamentally intractable benefits” (PEPERMANS & LOOTS 2013:323). Even if wind farm disputes are justifiably framed as being evoked between interests of landscape conservation or ‘place-protective actions’ (DEVINE-WRIGHT 2009a) and wider global climate interests, it is less adequate to conceive this all-embracing conflict as the fundamental and unique characteristic of the disputes. Placing multi-faceted conflicts over offshore wind farms in the focus of inquiry can be a further step forward that does not neglect the nuances, array of positions and dynamics that shape local wind energy controversies, as demanded by BARRY & ELLIS (2011) when calling for an agonistic understanding of wind farm disputes. An agonistic perspective does not attempt to ultimately resolve conflicts by striving for consensus, but acknowledges the legitimacy of opposing interests and arguments by seeking agreement. Such an agreement could be built on particular conflict dimensions assembling the breadth of wind farm siting issues, rather than resolving *the* wind farm siting ‘conflict’ once for all. That is why identifying particular types and levels of conflict and revealing their underlying motivations, arguments and dynamics can add value to the current debates about the contested siting of wind farms. On the one hand, conflicts are the problem to be examined, instead of the judgemental and partial terms of barriers to and acceptance of wind farms (AITKEN 2010a) which have often been used in a semantic contiguity to conflicts. On the other hand, arguments, motivations, beliefs and values that constitute conflicts become the epistemological reference point at the same time. Thus, examining conflicts, as the starting point of epistemological inquiry, is expected to produce a more nuanced understanding about the causes of particular conflicting practices beyond the overarching and gridlocked polarisation between tangible local impacts or rights to the landscape and intractable global benefits of wind energy including the progress towards a low carbon economy (PEPERMANS & LOOTS 2013; VAN DER HORST & VERMEYLEN 2011).

*Secondly*, studies on wind farm siting disputes have increasingly emphasised the significance of spatial conditions as well as the meanings and values attached to them by conceptualising place attachment and place identity (DEVINE-WRIGHT 2009a, 2009b; DEVINE-WRIGHT & HOWES 2010), constructions of landscape (WOODS 2003,

ZOGRAFOS & MARTINEZ-ALLIER 2009), seascape (GEE 2010) and energy landscapes (VAN DER HORST & VERMEYLEN 2011, 2012; PASQUALETTI 2011b), which presents a strong foundation for this research. A common ground of these studies is a constructionist approach to conceptualise the spatial conditions. Addressing the various values and meanings of spatial conditions as they are characterised by involved and affected stakeholders has created valuable arguments for the exploration of oppositional motives. Other approaches that consider the spatial context rather highlight the significance of 'objective' conditions, such as distance and proximity, in shaping attitudes towards wind farms (JONES & EISER 2010; LADENBURG & MÖLLER 2012). However, the constructionist perspectives can be continued and expanded more rigorously by explicitly integrating the spatial dimension in the conflict context. Focusing on the various meanings and constructions of space within the offshore wind farm controversies may help to achieve a deeper understanding of underlying conflicting arguments. Thus, people's interests in particular spaces and their practices related to spaces that are meant to be affected by wind farm developments can give further indication of oppositional motivations of stakeholders.

Moreover, literature increasingly points to the relationship between wind farms and communities, and stresses the more or less pronounced role of communities in wind farm planning. It is hardly disputable that local communities occupy a crucial position in the controversies over wind farms. But the overemphasis of communities tends to marginalise other conflicting issues, such as environmental impacts and crudities in planning, even if these often tend to take up an intermediate position in the disputes between the wind farms and communities. Making use of an epistemic triangle consisting of various expressions of spatial conditions, conflicting interests and actions of stakeholders as well as the institutional conditions, can provide a new insightful approach to conflicts over offshore wind farms.

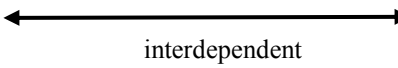
Apart from the thematic obscurities in offshore wind farm research, there is also a gap in the geographic focus of empirical studies. The majority of empirical studies have focused on English, Welsh and Danish offshore wind farms, as those countries are the forerunners in offshore wind energy planning. The empirical focus widened only occasionally to other regions, such as Spain (TODT et al. 2011), Sweden (SOERENSEN et al. 2001; WALDO 2009), the Netherlands (WOLSINK 2010) and the

United States (KEMPTON et al. 2005, FIRESTONE & KEMPTON 2007). The large number of upcoming offshore wind farm projects in Scotland and Germany has only very rarely been the subject of research on siting controversies (BYZIO et al. 2005, GEE 2010; O'KEEFFE & HAGGETT 2011).

### 1.3 Research Objectives

Based on these research gaps and in order to deconstruct spatial conflicts an integrated perspective is required which considers subjective-individual and institutional, social and political contexts alike. Following the identified gaps and recalling the research questions, several research objectives can be identified for the research project. Those objectives can also be arranged according to the various conflict-forming scales which can again be allocated to the different parts presented in this thesis. The following table conflates the level of conflicts with research objectives.

**Table 1: Synopsis of underlying research framework**

	<b>Conflicts</b>	
	<b>Macro-perspective</b>	<b>Micro-perspective</b>
<b>Relationship &amp; analytical orientation</b>	 interdependent	
	<i>structural / discursive</i>	<i>action-oriented / individual</i>
<b>Research Themes</b>	<b>I.)</b> Conflicts that arise from moving wind farms offshore and their context	
	<b>III.)</b> Existing planning frameworks that address and shape conflicts	<b>II.)</b> Manifestation and characterisation of conflicts at local level → Stakeholders who produce conflicts through their interests, arguments and practices and spatial constructions

<b>Related Research Questions</b>	<p>What are the conflicts that emerge from moving wind farms offshore?</p> <p>What are the (counter)-discourses that form conflicts?</p> <p>What capacity does the planning framework have?</p>	<p>What are the interests and goals of the stakeholders?</p> <p>By which practices, argumentations and reasoning do stakeholders enforce their goals?</p> <p>What are the dominant storylines forming the (counter)-discourses?</p> <p>How is space constructed in the conflict context?</p>
<b>Practical Implementation</b>	<ul style="list-style-type: none"> <li>• identification of discourses that frame conflicts over offshore wind farm</li> <li>• reconstruction and analysis of conflicts from data material</li> <li>• examining the power relations within the conflicts by considering the mechanism of the planning regimes</li> </ul>	<ul style="list-style-type: none"> <li>• presentation of the case studies and involved stakeholders</li> <li>• analysis of stakeholder interests, arguments and practices of actors</li> <li>• analysis of discussions, patterns of argumentation and practices of actors</li> <li>• reconstruction and portrayal of the discourses at local level by identifying storylines, argumentative patterns</li> <li>• revelation of the different meanings of space</li> </ul>
<b>Level of Discourse</b>	(counter)-discourses within the local conflicts	storylines, arguments, practices producing (counter)-discourses

This table further disentangles and specifies the previously listed research questions within the overarching framework for addressing the phenomena of space-related conflicts. It reflects the three key research themes including the emergence of conflicts at the local level, the significance of the planning frameworks and spatial conditions, and connects them to the socio-theoretical background that embraces the reciprocal conflict dynamics between structural conditions of wind farm planning and oppositional practices at the local level. The research themes are also attuned to the theoretical research direction of a discourse analysis, and are specified through related questions that inquire after the discourses and counter-discourses shaping the conflicts as well as the underlying argumentative practices. Details of the conceptual research instruments will be presented in the next chapter by developing the conception of space-related conflicts and by illustrating the discourse analytical approach.





## **CHAPTER TWO: THEORETICAL CONCEPTION**

### **2.1 Necessity of a theoretical framework**

The purpose of this section is to prepare the development of the theoretical framework for approaching space-related conflicts by pointing out the necessity of engaging with theory in human geographical research. Although theoretical considerations play a major role in advancing various branches of human geography as a discipline, the research focus often lies rather on empirical studies that merely implicitly refer to a theoretical grounding of respective studies. This might be due to the fact that geographical theory has predominantly absorbed notions from its neighbouring disciplines and refined central ideas for geography-relevant problems. In turn, some geographical ideas have pervaded the humanities and have enriched interdisciplinary dialogues (e.g. spatial turn; reassertion of space in social sciences, WARF & ARIAS 2009; SOJA 1989).

Nonetheless, there are several reasons for integrating a theoretical framework in practical research and to fruitfully combine both strands to achieve complementary impacts and benefits. At first, theory simply provides a compilation of ideas of how particular phenomena of the world can be understood and described. In a more human geographical terminology, theory presents a mixture of approaches of how the relationship between humans and space can be conceptualised in various thematic strands. Hence, competing theories shape the production of geographical knowledge differently. But addressing theoretical stances in empirical research does not only help the researcher to approach and to make sense of research objects, problems or particular questions, a conceptual frame also facilitates the researcher to make the study more transparent and comprehensible for an audience. So, theory can be considered as an analytical method to deal with a particular issue and thus “infuses the practices of academic geography” (HUBBARD et al. 2005:4).

Secondly, a theoretical conception serves to avoid rather naïve everyday interpretations of investigated issues. This is particularly necessary when drawing on qualitative-hermeneutic empirical research, as applied in this work, in which theoretical prerequisites guide the research procedures. Findings of qualitative research do not represent definite knowledge, but coherent interpretations that commensurate with the theoretical pre-understanding upon which the researchers

draws (REUBER & PFAFFENBACH 2003). Moreover, the application of theory also helps to justify and illustrate previous gaps in research that can be addressed from other perspectives in order to attain new insights into particular issues.

Thirdly, theory permeates and determines methodology. The theoretical understanding of and approach towards an investigated problem also determine the associated questions and methods employed to answer these questions. Hence, a certain consistency in theory is required to cross and link epistemology and methodology. Consequently, theoretical tools may also have the functionality of bridging the gap between methodology and empirical results, as the preceded theoretical grounding is highly influential to the analysis of the data material. By means of an explicit theoretical re-interpretation of empirical results, this relationship can be clarified and may become more transparent.

Finally, theory is infiltrated ideologically with social and political ideas of certain philosophies impinging on the context in which the researcher operates. Ideology inevitably frames theory and so forms an essential part of seeing and changing the world. Thus, theory may also determine the crucial factor of making an impact with research. In general, the production of geographic knowledge is decidedly dependent on theory infusing all parts of research.

The following sections will introduce important themes that frame my understanding of geography and my research approach to space-related conflicts.

## **2.2 Understanding and researching conflicts**

In research-practical terms, conflicts *per se* are not observable; only actions and behaviours of involved actors can be conceived, described and thus utilized for research purposes.

Accessing the term conflict is basically conditioned by the research-related objectives. A different understanding of what a conflict is and what it might engender depends on the underlying theories and levels of controversy or contestation. So finding a coherent and universal definition of conflict is hardly possible as it holds myriad phenomena and parameters according to respective disciplines, orientations and research questions and would render such a definition

rather blurry. But considering conflict *per definitionem* is indispensable for the way forward and it is therefore necessary to approach ‘conflicts’ from a perspective that is embedded in the specific disciplinary context of geography.

### **2.2.1 An attempt to define conflicts**

As initially indicated, various disciplines, philosophical and ideological stances hold different conceptions of conflicts with specific terminologies. Nevertheless, most definitions have some elementary features in common. Without having the aspiration to untangle the ravel of definitions and to provide an exhaustive list of conflict theories, only a few classic ideas relevant to a further conceptualisation of the theoretical framework will be taken into account. It is not complicated and common sense to consider conflict as something that contains some kind of antagonism. However, it is rather intricate to grasp which antagonistic social phenomena are used to define conflicts. It will be essential to figure out which common aspects are used to delineate conflicts. For that reason, some social theories, implicitly and explicitly incorporating conflict themes, are used to derive an initial understanding of conflicts that are compatible with the later consideration of spatiality and that can be augmented to investigate space-related conflicts. All these concepts of conflict need to be understood dialectically with the theories and perspectives with which they are connected.

One of the first scholars who developed an actual theory of conflict was *Ralf Dahrendorf*, who builds his understanding of conflict upon *Marx* and *Weber* to originate from the division of class or power and status respectively. DAHRENDORF (1958:173) proposes that a sociological theory of conflict should confine itself “to an explanation of the frictions between the rulers and the ruled in given social structural organisations”. Without classifying or circumscribing these social structural organisations, he attempts to explain conflicts “by deriving these events from social structural elements” and “social structural arrangements” (DAHRENDORF 1958:171) on which they are based. Hence, conflicts should be exposed by looking at the structural context that causes them. Another essential contribution to grasp the term conflict has been made by *Lewis Coser*. COSER (1957) emphasises the functionality of conflicts for social change. Conflicts and tensions within or between social groups are grounded on a clash of values and interests that are seen as productive for vitality and as a driver for social change in a society. Both theories are rather directed

towards the macro-scale of conflicts and their significance for social processes to inform societal structures. While acknowledging the micro-level, GIDDENS (1984:198) defines conflicts as “struggles between actors or collectivities expressed as definite social practices”. This means that conflicts become visible only through active practices, as stated earlier. Conflicts coincide with contradictions which are disjunctions on the structural level that tend to involve divergent interests determining conflict practices and struggles.

When reconsidering these extremely brief sketches some implications should yet become clear. At first, it becomes obvious that all approaches to conflict exhibit a common description of some kind of antagonism. But all definitions present a different or rather vague scope in integrating the social world. The social world in terms of individuals, actions, interactions and societal levels remains multifaceted. So it can be concluded that each conflict theory addresses a different level of conflict. They may focus on the micro-level by looking at actors and their interests and actions, some theories involve entire conflicts looking at their chronology and constitutive interactions and events, and other perspectives consider conflicts at the macro-level as society-regulating processes (HAMHABER 2004). Besides the vague incorporation of the social world, further conclusions can be drawn from the depicted definitions of conflict.

The fact that (instead of conflicts *per se*) only conflict-laden human actions and behaviours can be observed has wider implications. It implies that conflicts do not refer to factual issues, but rather to specific relationships between people, groups, stakeholders or other organisations that involve acting humans. But such relationships are again nothing but social constructions. So conflicts do not exist objectively and only denote a specific situation or process in which an antagonistic relationship of groups of people occurs. An antagonistic relationship usually manifests in different and divergent interests, goals and opinions shaped by discourses on which actions and behaviour are based.

However, mere antagonistic and contradictory interests do not suffice to define a conflict. Only as soon as such antagonisms are related to each other or constitute an interdependent relationship, contradictions might occur as a starting point of conflicts. According to GIDDENS (1984), this implies that latent divergent interests

are insufficient to frame conflicts. A concrete conflict situation can only occur and manifest through the presence of possibilities for actions. All approaches to characterise conflicts also implicitly include a temporal dimension. Social conflicts should not be regarded as a fixed event in time. Conflicts emerge, evolve and cease over a certain period of time and thus feature a processual character that is shaped by human interactions. Another implicit component that pervades conflicts and related practices is power. Power may be unevenly distributed among individuals and groups and finds its expression in social interactions and might be conducive to the outcomes of conflicts.

Keeping these derived deliberations in mind, the following conclusions can be drawn to make sense of the social phenomena that formulate conflicts and that can be consulted to analyse conflicts. *Conflicts are dynamic processes that are shaped by divergent and antagonistic (inter)actions embedded in societal structures and discourses, originating from competing interests and goals of actors.* According to this abstraction, conflicts could be investigated by addressing the conflict-oriented interests and actions of individuals or groups as well as the constitutive context in terms of structures. In other words, social conflicts embrace the micro-level in terms of a relational network of antagonistic individual interests and actions as well as the macro-level in terms of the formative societal context (as illustrated in figure 1).

How it is possible to combine both without underlining or neglecting neither one of the levels will be presented in the following sections. But before, it will be necessary to illuminate an approach to address conflicts in geography.

### **2.2.2 Conflicts in geographical research**

Human geography can look back on a long tradition of researching spatial and geographical conflicts, which also reflect essential foundations of the field of geography. These foundations include the relation and interaction of society-space, human-environment and local-global, that all become widely relevant in the context of conflicts over offshore wind farms, too. In geography, three central and interwoven sub-disciplines explicitly address geography-related conflicts, albeit emphasising different aspects. These approaches comprise Critical Geopolitics, Political Ecology and Geographical Conflict Research, whereby strengths of the

latter one are considered to be most pertinent for investigating conflicts over offshore wind farms. These will be outlined in the following section.

### ***Action-oriented geographical conflict research***

The so-called action-oriented political geography evolved from recent developments of German-speaking human geography and does not seem to have made any appearances in the British or Anglo-American geography, although it draws on achievements associated with Critical Geopolitics. Political Geography has been neglected for a long time in German-speaking geography. This was because of the manipulative entanglement of geo-deterministic thinking of the *Geopolitik* into the national-socialist ideology. Only the renunciation of geo-deterministic attitudes and the orientation towards social constructionist epistemology helped to cast this burden off. Also the aftermath of radical and critical approaches to political geography in British and Anglo-American geography facilitated an independent sub-discipline to evolve in the German-speaking geography.

Current conceptions of political geography, in its widest understanding, deal with the social construction of space and its significance and relevance for societal and political interactions (REUBER 2000). Based on this premise, political geography divides into a strand that has evolved from ideas taken from critical geopolitics and that focuses on the deconstruction of geopolitical principles and a strand that explicitly deals with various kinds of spatial conflicts. Although the basic objective of this work is to examine the operational modes of discourses that frame the conflict context, it will also be crucial to enquire into the elements that are responsible for the emergence and the course of conflicts. For this purpose, action-oriented geographical conflict research provides some useful and practical notions for the exploration of wind farm conflicts.

A practice-oriented approach provides a novel perspective, to explain the formation and modification of spatial structures on the basis of human practices. The starting point should no longer be space but the actions that produce spatial structures. This implies a shift from space as the research object to various practices that create and shape 'space'. Such a perspective takes a social constructionist premise for granted which focuses on perceiving and acting human beings. The goal of geographical research should not be the spatial description of the 'geography of things' as in

traditional space-centred thinking, but the understanding and explanation of everyday geography-making, the subjectively produced geographies (WERLEN 2005).

However, the relationship between action and space, as being solved and fathomed from the side of practices, is not the only one that needs to be considered when looking at practices or actions in order to understand the construction of geographies. The impacts of the structural level have to be considered as well, since the intentional and goal-oriented actions are limited by structural framework conditions, such as the planning framework for wind farms, which enable or restrict certain practices and thus impinge on the appearance of conflicts. So, actions are always an expression of the socio-cultural context. Actions are affected by social structures, but in turn social structures are constituted as a result of actions. Actors do not possess the capability to act unrestrainedly; they are constrained by cultural and institutional rules, but reproduce these structures simultaneously. This complementary interplay, the duality of agency and structure within action-oriented geographical conflict research, refers back to GIDDENS (1984) notion of duality of structure, which has been utilized for human geography by WERLEN (1997)<sup>5</sup>. So, practices in the conflict context do not only reflect space-related actions, but also the societal and institutional conditions to which actions are bound.

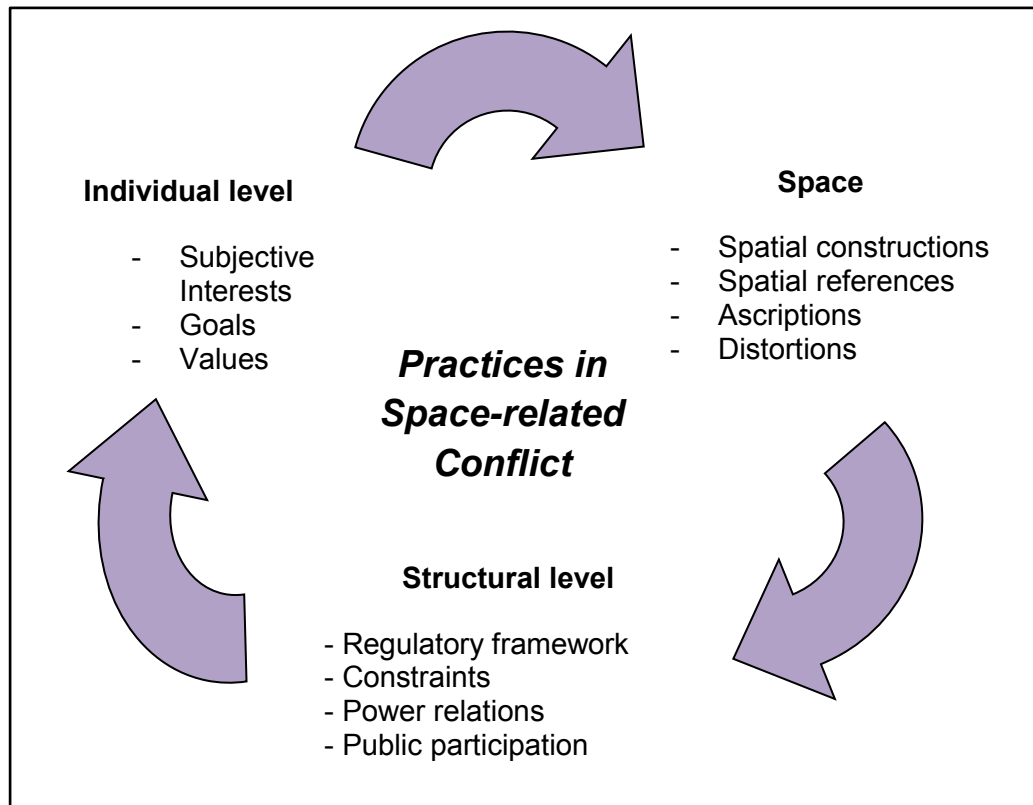
Therefore, the fundamental objective of an action-oriented geographical conflict research is to address and understand the occurrence of conflict situations and related practices in the interplay of subjective interests, institutional norms and societal structures, as well as physical-material conditions. So, this concept makes use of a trialectic understanding that involves three constitutive elements of spatial conflicts with a particular attention to the consolidation of individual interests and societal conditions. The individual level refers to the subjective situational elements of conflicting practices including interests, values and goals, and is grounded on the understanding called revised methodological individualism, which implies that only individuals can be actors without denying that they can act as collectives or on behalf

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<sup>5</sup> This adoption of the Theory of Structuration differs fundamentally from former ones that came up with the debate of the New Regional Geography in the late 1980s, especially in works of A. Pred and N. Thrift, which focus on actions embedded in enabling and constraining structures. The recent and more radical adoption considers actions as the “region-building forces” and “as the power for the social formation of place and region” (WERLEN 2009a:54) in the sense of ‘geography-making’. Consequently, not regions as entities, in whatever shape, should be considered, but the practices that produce regions or geographies.



of groups or institutions (WERLEN 1995). The trialectic is completed by an additional consideration of a spatial component in terms of constructions of spatial conditions that are predominantly guided by the underlying interests and goals of actors. Spatial conflicts are examined by means of conflicting actions and conflict-relevant societal interactions, which are equally determined by subjective space-related goals, societal norms and institutional rules as well as social constructions of the spatial conditions that may likewise represent the object of conflict.



**Figure 1: Trialectic of constitutive elements of space-related conflicts, based on REUBER (2001)**

With regard to the triangle of interests and the conditioning social context and spatial conditions, REUBER (1999:7) identifies a range of criteria that are specific to space-related conflicts.

- specifically and differentially perceived space-related (spatial-structural) situation
- goals and spatial utilization interests of the actors
- socio-political structures, rules and institutions that shape the conflict
- related power relations and action strategies

- impacts and consequences of the conflicts (also for the actual spatial structures)

In order to investigate space-related conflicts it is crucial to be guided by these aspects. In doing so, different stakeholders, their interests and actions towards the siting of offshore wind farms, their perception of the spatial conditions as well as the normative and institutional conditions (planning, participatory framework) need to be explored when dissecting conflicts over offshore wind farms. Those elements synthesise the gaps identified earlier and reflect some of the key themes that are variously addressed in this research. That is why the thoughts outlined in this approach are considered most appropriate to be applied in this research.

Conflicts are studied based on the different subjective perceptions of reality and the actions and strategies resulting from these views. Differently perceived realities, which rather manifest as social constructions, build the foundations people act upon (REUBER 2001:81). Only subjective divergent perceptions and inter-subjective imaginations of the spatial conditions may cause divergences leading to a conflict situation. Consequently, the objective of geographic conflict research has to be altered, too. The research interest now aims at the revelation of the hidden contents and intentions of space-related actions, regionalisations and language games of the actors by making use of deconstruction and interpretation (REUBER 2001:80). So it is not very difficult to notice the rather micro-scalar character of this approach to analyse and understand conflicts. Despite the explicit focus on actions and their conflict-relevant origins and effects, actions do by no means result exclusively from completely free decisions by the actors, but are subject to the contextual and structural conditions that enable and restrict the practices in the conflict process. Individual preferences produce a manifold tensional relationship with predefined framework conditions (REUBER 2001:80) which may also fuel the conflict situation, independent of its actual causes and triggers. The significance of structural conditions in relation to wind farm controversies has already been stressed (WOLSINK 2007a, 2007b) and is also a central theme within the following research on offshore wind farms.

REUBER (1999) developed this framework while examining spatial conflicts over a communal boundary reorganisation. He derived his framework from several

theoretical approaches such as rational choice approaches, the previously mentioned action-centred social geography (WERLEN 1995, 1997) as well as GIDDEN'S (1994) duality of structure and understanding of power. The overarching goal is to reconstruct the interplay between subjective interests and goals, spatial imaginations, as well as institutional norms and structures as conflict-constituting elements. Such an understanding draws on the constructionist premise that a quasi-objective conflict reality does not exist, and that only a variety of different and actor-specific views and practices compete with each other (REUBER 1999). The theoretical framework of space-related conflicts has been conceptualised as a "normative guideline for understanding conflicts" (REUBER 1999:37). So this normative guideline for the examination of space-related conflicts based on *action-oriented geographical research* has most notably been, in various manifestations, applied in the German context to examine conflicts over the siting of mosques (SCHMITT 2003), electricity imports (HAMHABER 2004) and participative water management (UHLEND AHL 2013) among others. HAMHABER (2004) identified social spaces that are permanently constructed, redefined and questioned by different actors in a conflict context and concludes that conflicts are not only about resources and the physical space. Conflicts are rather pervaded by manifold socially constructed spaces that are the condition, means and result of conflicting practices. In contrast, while identifying local conflicts that emerged from the building of mosques in different cities in Germany, SCHMITT (2003) has drawn less explicitly on the spatial dimension of the framework. He rather focused on different actors, types of conflicts and the analysis of their dynamics by looking particularly at aspects related to town planning, culture, ethnicity and religion. On the contrary, UHLEND AHL (2013) regards the conceptualisation outlined by *Reuber* as being ideally transferable to the context of space-related planning processes that deal with different actors and spatially constrained resources. Nevertheless, he additionally refers to practical notions borrowed from conflict management to overcome a pure theoretical-descriptive analysis of actors and their interests.

All these studies applied the framework in a rather uncritical way, but expanded and enhanced particular elements that are beneficial to the actual research purposes. This is because the framework predefines the different levels that should be considered in the examination of space-related conflicts, but leaves enough room for different strategies as to how each element of the triangle of conflicting practices is weighted

and addressed. So, it is flexible regarding theoretical amplifications and different methodological approaches depending on the research topics and research questions. However, such a framework has not been operationalized to analyse conflicts over wind farms in general and offshore wind farms in particular. Moreover, this conceptual framework on space-related conflicts can even be broadened by discourse analytical notions, which will be outlined in section 2.4.

In summary, this delineated theoretical conceptualisation allows the investigation of spatial conflicts by means of human practices on diverse levels and does not exclude the meaning of space and scale as well as structural parameters like power, planning regulations and policies from the conflict context and can even be enhanced by including a discursive level. When following this framework to examine conflicts each constitutive corner of the triangle comprising the individual level, the spatial component and the structural level has to be separately illuminated in more detail. This is meant to foster the understanding of the role of each one of the parameters that mutually determine a general conflict situation and engender specific conflict constellations. The subsequent sections in this chapter shall elucidate how each element can be conceptualised, how it becomes relevant in the conflict situation and how it is interrelated to other parameters.

### **2.3 Significance of the spatial dimension - From spatial to space-related conflicts**

Whilst social conflicts have extensively been discussed in social sciences, the role of a possible spatial component has been considered to a lesser extent. The significance of spatial contexts has often been stressed in the wind farm literature, but the category of space has remained undertheorised. As resonated in the previous descriptions of how spatial conflicts can be addressed in geography, the significance of space, as however conceptualised, becomes vital in geographic research of conflicts. Therefore, the following sections should explicitly deliberate the amalgamation of conflict and space by finding an appropriate concept of space that is suitable for the integration into conflict research.

The following sections deal with the insertion of spatiality, or better the spatial dimension, into the research of conflicts in order to merge the previous elaborations on conflicts with the dimension of space, to expand the theoretical conception that

was initiated by REUBER (1999, 2001). It is necessary to start by checking which understanding of spatiality geography has already to offer with regard to conflict and space.

Spatial structures in space-related conflicts gain significance as they are the conflict object to which divergent human interests are directed. Similar to that, they can be regarded as the trigger of the conflict, not due to their materiality or nature, but because of their meaning constructed and ascribed by actors. Therefore physical or material structures must not convey the impression to be virtually a separate and objective category outside the social realm. Spatial structures within space-related conflicts should rather be illuminated from its societal and actor-related context (REUBER 1999:29). So 'space' should be regarded as a constitutive component in conflicts, but indirectly integrated through human perception and imagination.

According to these notions, further theoretical suppositions can be done. First, actions in conflicts should not be reduced to material acts, but may also involve other discursive practices. Secondly, by looking at conflictual interests and practices, land use conflicts, like to ones challenging the locations of offshore wind farms, can now be characterised as conflicts of contrary interests. Thirdly, this implies an epistemological shift from space to action and practice. Hence, a spatial conflict should be conceived as a conflict of overlapping or divergent interests, which are directed to 'space', represented by acting people. Regarding these definitional characteristics I, fourthly and most importantly, argue that it is more appropriate to make use of the term space-related conflict, rather than spatial conflict. This terminological distinction seems especially relevant in English as the term 'spatial' is preponderantly used to point to any relevance of or reference to "space". In contrast, in German two different terms are distinguished, spatial (räumlich) and space-related (raumbezogen). In particular, the latter is utilized to indicate any reference to 'space', by which the constructionist character of space is explicitly highlighted. Hence, the term 'space-related conflict' also facilitates the retention of the epistemological shift towards interests and practices as the research object of conflicts by defining a 'space-related conflict' as a "dynamic process by which contrary goals and utilization interests are aimed at the same spatial area" (REUBER 1999:7). But this comprehension of space-related conflicts requires a specific conception of 'space' that allows for the incorporation of multifarious spatial categories into the analysis of

conflicts. Therefore, the social construction and the representation of spatial and physical-material conditions and its relevance for space-related conflicts will now be picked up and elaborated in more detail.

The following sections serve to develop a conception in which spatial conflicts become reformulated and redefined as space-related conflicts which makes an integrated consideration of the individual and structural levels possible and takes the spatial dimension equally into account. Therefore it is necessary to theorise the fundamental conceptions of space in human geography first, in order to deduce a viable notion of space that is appropriate for investigating space-related conflicts. But this project is not without difficulties as there are many different notions as to how spatiality has been integrated in the production of geographical knowledge.

### **2.3.1 Conceptualisation of space in geography**

Basically all approaches to space are reflected in the different ways of how to conceptualise the relationship between space and society. So, the concept of space is essentially influenced by the epistemological direction which creates the relationship between society and space, or in more appropriate terms, between the social and the physical world. The modifications of this relationship go along with the paradigmatic shifts in human geography. Furthermore, the different conceptualisations of space also mirror the fundamental debate in social sciences dealing with the interrelations between the social and the material world, and the fundamental problem of relating spatial categories to social processes and vice versa, which are usually characterized as a dichotomy.

#### ***Substantial and material space***

A geo-deterministic conception of space underlines the structuring efficiencies of space. On the one hand, space is regarded as something substantial and pre-given outside of society or as ‘container’ in which or a ‘stage’ on which all social processes take place. Such a perspective of a Kantian *a priori* space has widely been neglected in post-modern times. On the other hand, space is regarded as a material and physical entity.

Even though many scholars (especially, Lefebvre, Harvey, Bourdieu) develop space as a product of society itself they focus on spatial and material structures as a result

of the structures of the society, especially as a result of the capitalist dimension of spatial structure, but exclude any other kind of qualities of space. In that sense, BOURDIEU (1999:123) attempts to combine the social and material world and claims that there are “relations between the structures of social space and those of physical space”. This relation between the social and the physical world is insofar expressed as social structures are inscribed in the physical space. Hence, the position of an agent in the social space is also expressed in his or her position in the physical space, so that the “social space translates into the physical space” (BOURDIEU 1999:124). This means that social differences appear to the same extent in physical space. Arguing from a reverse direction, this notion might lead to the epistemological delusion of a ‘spatial heuristic’ (HOWARTH 2006), assuming that it is possible to derive social structures and meanings from the physical conditions. This may well be an apt observation of mundane manifestations, but might also lead to a substantial thinking of space insofar as physical objectified social structures could be taken as factual and could even be used to explain social processes, as criticised by LOSSAU (2007), who fiercely states that it is impossible to reason from bodily experience to the social meaning of material objects. As already suggested with the idea of place attachment (DEVINE-WRIGHT 2009a), a social constructivist perspective is more appropriate to understand the role of the spatial conditions in conflicts over wind farms. This will be elucidated in the next section.

### ***The social and the rest – relativistic and representational space***

Space does not only become relevant through its physical and material substance. Space becomes an expression of the social structures and practices. Based on a constructionist thinking geographical space is considered as a social construct, whose formations are to be explained for various contexts. According to a more moderate social constructionist position, an objective world outside human perception and experience is not denied, but this ‘real’ world cannot be discerned objectively and is subject to human interpretations and perceptions (JONES 2002). But, unlike imagination, perception always requires the presence of material object which can be perceived. However, not the materiality is the immediate source of knowledge, but the social construction of the material, as it is not possible to infer the social meaning from its physical appearance and characteristics.

This understanding stresses the discursive (linguistic, semiotic) construction of space and does not encompass any kind of materiality *per se*, neither as a pre-given reality nor as an outcome of social structures as it is suggested by radical geographers. Space is here conceived through its constructed significance for social practices and rather forms the context for action. But both strands stress that “no space imposes [any] specific action” (LÖW 2008:26) and is therefore not constitutive for the social world in the same sense as postulated in geo-deterministic thinking. Within such a representational conception, space is not *a priori* important because of its physical existence, but through its ascriptions of meaning in particular societal, cultural and political contexts. This idea is grounded on the naturalistic fallacy linking the societal with the physical-material space and thus transforms structures of the social world, that are actually based on symbolical practices of giving meaning, into seemingly natural geographical realities (LOSSAU 2007:63). The quasi-natural character of geographical entities, such as lakes, islands, mountains, rivers or coasts, is meaningless and does not have any inherent and objective status or disposition. Any particular functionalities or strategic relevance are human ascriptions or become only meaningful through human practices. So, geographic and material particularities are only significant for societal processes through its ascribed attributes. But this also means that there is no immediate connection between the meaning of places or spaces and their physical materiality and thus the meaning cannot be deduced from the ‘space’ itself. The epistemological understanding is that physical material conditions become relevant through their representations, as geographical imaginations: “In spite of its relatively enduring and imposing materiality, the meaning or value of the same place is labile – flexible in the hands of different people of cultures, malleable over time, and inevitably contested” (GIERYN 2000:465). Hence, spatial conditions become an element of practices of social representation. The circumstance of differentiated and possibly opposing perceptions, representations and imaginations of space allows for its integration into the analysis of conflicts over wind farms.

The most appropriate definition of the category ‘space’ to be integrated into conflict research is also a fairly broad one. This research on space-related conflicts over offshore wind farms makes use of a conception of space stressing space as a “social construct, ultimately a category of thought through which human beings make sense of, and then act within and upon, the world around them“ (WERLEN 2009b:286). So



spatial conditions only inform practices through their constructedness. The spatial dimension in conflicts is constructed in social processes and retroacts to and informs these due to its constructed qualities, and not because of its physical existence.

### **2.3.2 Conflicts – From space to space-related practices**

If we accept that space is socially produced and reproduced it cannot be presupposed that space is constitutive of the social world at the same time. Space rather signifies a discursive frame of reference by which actors refer to the physical and social context. Due to the bodily existence of humans and their positions and relation to other physical things, the physical environment becomes of course relevant for human activities, but it is not the only relevant factor (WERLEN 2005). So the material and physical environment “becomes only meaningful through interpretations in the course of the execution of actions, thus with respect to certain intentions and under certain social and subjective conditions” (WERLEN 2005:50). But the meaning of spatial constellations and conditions cannot be detached from the contextual practices, through which they are produced and reproduced. ‘Space’ is not antecedent of actions and cannot be used as the explanans of societal facts (LOSSAU 2007). It is nothing else than a terminological conceptualisation of the physical-material reality.

The interpretation and significance of spatial conditions for practices play a key role in the context of space-related conflicts, as the divergent subjective perceptions of the spatial conditions find their expression in different space-related interests that may manifest in conflicts. As mentioned in the context of conflict theory, only antagonistic interests and resultant actions provoke and determine an active conflict. Particular meanings are ascribed to the physical and social elements according to the respective intentions. Of course, space-related conflicts may also have causes other than that.

Following the previous notions, now “spatial problems can rather be understood as problems of certain types of action” (WERLEN 2005:49). And space can only be integrated as an inherent element of action, as it has been mentioned earlier. This presents the fundamental implication that allows for the shift from spatial to space-related conflicts. ‘Space’ as the object of conflicts should not be regarded as an objectified or reified space *per se*, as only particular and contrasting constructions of space may become the object or cause of conflicts, although such a construction may

entail a reified entity. This is what WERLEN (2004:164) describes as “ways of naturalizing the symbolic”. Mostly, the material dimension seems to be prevalent so much that the social and discursive constructedness is only hardly comprehensible.

However, the wide constructionist notion of ‘space’ is also the reason why using the term ‘space-related’ itself is preferred to other terms like place, landscape etc. that likewise accommodate a spatial reference. But unlike these other terms, and in a more radical sense, the word ‘space’ does not seem to be a predefined construction already having a specific meaning and is therefore more suitable for assessing social, economic, political or symbolic constructions of spatial conditions. However, landscape is not a physical constant either, “it is rather given only in relation to its inhabitants, to their lives, movements and purposes, and the places where they dwell, and draws its meanings from these relations” (INGOLD 2011:129). It is “a material, dynamic and social process embedded into the local realm” (NADAI & VAN DER HORST 2010a:148). A similar idea is invoked by HARVEY (1996:291) who regards place as already “constructed and experienced as material ecological and intricate networks of social relations”. This complies with DEVINE-WRIGHT’S (2009a) reference to place attachment and place identity within wind farm literature, which signify the process and product of attaching oneself emotionally to a place and the ways in which symbolic ascriptions to places contribute to one’s identity. In contrast to place and landscape, ‘space’ has rather the character of an empty phrase, that can have many different significations in everyday practices and that is open for a variety of different constructions, attachments, appropriations<sup>6</sup> and ascriptions, or “regionalisations” as WERLEN (1997) frames it. The focus on space-related conflicts provides a broader perspective that does not just understand the potential disruptions of symbolic and emotional attachments to places as triggers of wind farm controversies. It also provides the opportunity to include various representations of and practices related to the spatial conditions as constitutive and strategic elements of conflicts.

However, it still has to be clarified how space can appear as a medium in space-related conflicts. In consequence of the previous abstract and condensed

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<sup>6</sup> The term appropriations refer to meaningful attachments and requisitions, subjective ascriptions of meaning and the meaningful construals and interpretations of objects (not in terms of private or commercial properties and possessions).

explanations, it can be argued that practices are neither solely social nor solely spatial, and that practice rather entails components of both. But the question is how the spatial dimension is mobilised through and involved in practice (LUSSAULT & STOCK 2010). Some thoughts on how the spatial dimension is integrated in conflict action and practice will be shown in the next chapter.

### **2.3.3 Strategic geographical imaginations**

Based on GREGORY'S (1994) 'Geographical Imaginations' and WERLEN'S (1997) fundamental notion of an intangible space that becomes only relevant through subjective perceptions and constructions in a particular action context, REUBER (1999) provides further implications for an explicit deliberation of spatial or physical-material conditions in a conflict situation. Within his *action-oriented geographical conflict research* he assumes that a threefold subjectivisation of spatial conditions based on a selective perception manifests in conflicts. Selective perception of spatial relations can be understood as consisting of subjective perceptions resting upon personal knowledge and experiences, and ensuing attitudes and utilization interests that become relevant for actions. Diverging views regarding the spatial conditions and relations do not only arise from unconscious subjective perceptions, but can also be purposely distorted towards personal interests. In case of conflicts, spatial structures are therefore subject to a threefold subjectivisation (REUBER 1999:31).

The first level relates to subjective spatial imagination and refers to the selective perception of spatial conditions. The actor constructs a portrayal of the physical-material environment and imputes social meanings to it. Hence, the starting situation is already shaped by values, norms and symbolic attachments (REUBER 1999:32). Here I argue that this perception of things can also be inter-subjectively shaped by discourses. The second step contains conflict-specific spatial objectives that evolve during the course of conflicts. Those objectives comprise space-related interests and goals (REUBER 1999:33). The final level describes 'strategic geographical imaginations' as distorted spatial argumentations in conflicts. Strategic geographical imaginations can be regarded as "consciously one-sided interpretations of local or regional geographies" (REUBER 2000:39). Such portrayals of reality serve the strategic argumentation and enforcement of personal interests. Physical-material conditions are instrumentalised in a sense that they are compatible with personal

interests but exclude others. Strategic imaginations do not only represent the objective, but also the means to enforce utilization interests, as mentioned earlier. It reflects the way spatial conditions, or better their diverse constructions, are utilized as a medium in conflict situations, and how it can be instrumentalised as an active strategy. By means of such strategic symbolisations, individual interests can be maintained in order to change or to prevent spatial structures from being changed, such as the construction of offshore wind farms. The production and utilization of strategic imaginations and symbolisations also depend on available resources and normative regulations and is therefore subject to existing power relations (WERLEN 1997:402).

#### **2.3.4 Summary – Spatial references in the conflict context**

SAUNDERS' (1986:195) fundamental statement that social theory is not necessarily aspatial and cannot “totally disregard the fact that social phenomena have a spatial existence and location”, but “space is not and cannot be the object of theoretical inquiry”, can only be partially accepted. As previous remarks have shown, any spatial category cannot be the object of theoretical or analytical inquiry into social phenomena. But the statement that social phenomena have a spatial existence and location has to be likewise rejected, as this strongly suggests the existence of *a priori* space outside the social world (HOWARTH 2006).

The constructionist premise allows rather for the consideration of space as a social construct with alterable references in the conflict context. Spatial (physical-material conditions as well as spatial artefacts of previous practices) conditions determine space-related conflict situations in a two-fold way. First, they are the object to which antagonistic interests and goals are directed. And secondly, they represent a strategic means to enforce interests and goals. The latter one occurs by means of strategic symbolic imaginations of spatial realms, locations, regions, or places.

But spatial and material references become only meaningful and relevant for a certain context of action through human ascriptions. So, spatial structures become powerfully imbued constructions, codes, symbolisation and references for social and political communication processes, such as conflicts. This is also where the conceptualisation of space as broadly understood by WERLEN (1997, 2005) departs from the notion of place attachment and place identity, even though both concepts

complement each other in their constructionist character. Physical-material conditions are only considered insofar as they become variously meaningful in particular contexts of action, such as conflicts. These constructions of 'space' can have different forms of symbolic, political or economic representations, appropriations or productions of physical-material conditions. So, 'space' is rather an empty signifier that allows for the consideration of various manifestations of spatial representations to be identified in the conflict context, such as meaningful places, landscapes and constructions of nature, administrative units, or tourism areas etc. In contrast, the notion of place highlights the emotional ascriptions to physical aspects (GIERYN 2000) and place attachment seems to conceive spatial conditions as pre-structured "meaningful locations" (LEWICKA 2011:209) that can be disrupted by external influences and changes, which does not mean that attachments to places are static. But, likewise, the bonds between people and places may only become explicit through the threat of change (DEVINE-WRIGHT 2009a). Consequently, space-related conflicts can include conflicts over particularly constructed places amongst others, but the notion of the disruption of attachments to meaningful places are not necessarily identical with space-related conflicts, as these can refer to more than 'places'.

However, it is argued that only social representations of spatial structures are significant for the settlement of conflicts and not their material character which does not have any intrinsic meaning *per se*. Although offshore wind farms and other technical infrastructures may well be regarded as 'actants' that somehow 'actively' participate in a conflict situation, as promoted by Actor-Network Theory, this terminological and abstract construction may lead to an inappropriate reification of the social dimension. Therefore, an actor-related conceptualisation is deemed to be more adequate to include the social (economic, political) dimension of conflicts and to have a higher knowledge potential by integrating spatial (and physical-material) references as social constructions. Of course, material conditions may become something like 'actants' through the narratives and practices of actors, but this should not be taken for granted *a priori*.

In summary, 'space' can no longer be conceived as objective and material, as independent from practices embedded in a certain context and, thus, not independent from humans who constantly constitute 'space' through practices. 'Spaces' are

meaningfully constituted social realities (WERLEN 1997:208). The notion of space, within this research focuses on the various constructions of the physical-material conditions in which offshore wind farms are placed, the ways how they are communicated, how they are constituted through language and as what they are constructed and for what purpose. Besides the interests and actions that are aimed at objectified spatial structures, it is the different manifestations of ‘space’ in the conflict context, in terms of interpretations related to the spatial structures, which become important for this research. Those are the references to ‘space’ that are suitable and important when inquiring into space-related conflicts over offshore wind farms.

Initially I argued that offshore wind farm conflicts exhibit a diversification from a merely linear economy-ecology contradiction of environmental conflicts, as mainly considered in political ecology, to multi-level conflicts, containing different conflict dimensions, scales and interests. Of course, this implies that not all conflict dimensions of a space-related conflict are hallmarked by spatial references and constructions. For that reason it becomes even more important to look at further societal conditions that determine, intensify or alter the conflict situation. Hence, it is furthermore argued that the emergence of conflicts do not only rest upon different subjective perceptions of reality and spatial conditions, but also on discursive struggles over truth. In order to operationalise the genesis of truth and reality, the role of discourses as constitutive and structural elements for generating inter-subjective purports will be illuminated in the following sections.

#### **2.4 Knowledge, power and space in conflicts**

The previous sections brought space-related practices as the object of analytical inquiry into the focus. The ultimate starting point of exploring space-related conflicts is the different imaginations of the spatial conditions, the space-relevant presuppositions and the implicit knowledge underlying these spatial references. Space is “referential to communication” (NETTO 2008:364) and thus active in interaction. So, it is assumed that the various meanings attached to spatial conditions can be inferred from a linguistic-argumentative level. In that sense, a discourse perspective points to the constructedness of geographies as linguistic phenomena. Language is a central mechanism to communicate meaning and has the capability to construct and present problems, and thus serves as a means of the construction of

social problems. It is the starting and reference point of reality. Also diverse spatial references are embedded in language and discourse and can provoke conflicts. Contrasting interpretations of and narratives about certain events, phenomena or physical-material conditions can be components of competing discourses, while the discourses constitute (spatial) interpretations. But discourse is not limited to a linguistic and textual level. HAJER (1995) views discourse as the product of human agencies that describe and make sense of the world, and they should always be considered in relation to the practices through which they are produced and transformed. Discourses are produced by “institutional practices and individual activities that reflect particular types of knowledge” (OCKWELL & RYDIN 2006:383). They involve social practices that are shaped by power and knowledge and that give meaning to certain phenomena beyond their physical-material appearance. Of course, the material siting of wind farms is not a social construct, but the relevant question is how and what meaning is given to the siting of wind farms. Meaning could be given to wind farms in terms of the need to tackle climate change, but also in terms of their local impacts. So, it is about how the siting of offshore wind farms is perceived and discursively constructed as a problem, which thus constitutes a conflict situation between divergent discourses. And one constituent of conflicting discourses can be various references to physical-material conditions.

Discourses are societal constructs that both reflect power relations and exert power. But this does not mean that supplementing a spatial dimension simply leads to a spatialisation of power and discourse. Space in conflicts is rather produced within and through the interplay of contestations between different actors, their perceptions and rationalities that are negotiated in institutional arenas. Argumentation and negotiation characterise the fundamental background of conflict situations. Negotiation is a sort of a management and solving of problems that involves interests, power resources, legal means and coalition formation. Different constructions of social and spatial reality and related knowledge are negotiated in conflict situations. In contrast, argumentation encompasses the exchange of rationales, reasons and argumentatively produced solutions (KELLER & POFERL 2011). These rationales and arguments are still social constructions, but it is rather the power relations in which they are embedded that come to the fore. Only rationalities frame knowledge that is deemed as truth, and imbue actually meaningless and empty physical and social phenomena with meaning and constitute

their societal reality and relevance. Competing rationalities generate discursive struggles over contested meanings and interpretations of reality. Rational arguments may finally become “appropriated as truth through the exercise of power” (SHARP & RICHARDSON 2001:197). Thus, a social conflict involves a struggle pervaded by power in which actors seek to enforce their views of reality.

In conflict research, power has mostly been conceptualised in a *Weberian* understanding as a resource held or possessed and exerted by actors, collective actors or institutions (ALLEN 2003). In contrast, FOUCAULT (1982) follows a relational concept of power that accrues from discursive practices which (re)produce powerful institutions. There is not an external reference point, and power is immanent and implicated in everything (ALLEN 2003). The mechanism and techniques of power “may pass through systems of communication” (FOUCAULT 1982:786), but only show up “as an effect on the actions of others” (ALLEN 2003:67). That means that power cannot be separated from knowledge and action and that conflict situations always reflect particular power relations between actors. Knowledge of our physical and social environment is a construction resulting from a multitude of context-related actions (BOESCH 1991). The conflict party who succeeds in imposing their knowledge in terms rationales, definitions and interpretations of a phenomenon is in the powerful position to decide the conflict. Thus, “opponents do everything they can to achieve hegemony in the interpretation of texts, the definition and explanation of historical facts, the constructions of narratives and the use of images and symbols” (MEUSBURGER 2008:59). One of those strategies can take shape of references to and representations of spatial conditions. So, ‘space’ as an abstract construct can be utilised to define and evaluate situations and can also be deployed as a powerful means to enforce and complement interests. Interpretations and social representations of physical-material conditions can become an important, but not the only component of the justification, distribution and application of knowledge and rationales. The constructed conflict situation about the siting of offshore wind farms consists of various contested interpretations of offshore wind farms and their local consequences. The actual challenge of this research is therefore the analysis of offshore wind farm conflicts as social constructs that are framed by antagonistic claims-making about wind farms.



A helpful theoretical instrument to examine discourses that frame conflicts and their underlying rationalities is provided by the concept of *Argumentative Discourse Analysis* that aims at the deconstruction of argumentative structures of discourses by combining discourse, practice and meaning.

#### **2.4.1 Argumentative discourse analysis**

As discussed, this research draws upon the premise that reality, meaning and social and political problems are socially constructed, and that processes of the societal construction of meaning and the conflict-ridden contentions between actors about valid definitions of reality can be ascertained by a discourse-oriented research perspective. Against the background, an argumentative discourse analysis is considered particularly useful to examine constituents of various conflicting issues. It provides a helpful account of how actors make use of discourses as a means to enforce certain targets. According to HAJER (1995) it uses language as a tool and acknowledges the central role of actors who are embedded in the duality of structure. Following broader notions of *Foucault*, discourse can be understood as “a specific ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices through which meaning is given to physical and social realities” (HAJER 1995:44). The central idea is that different discourses compete for influence in society and thus generate conflicts and shape specific policy-making processes (SHARP & RICHARDSON 2001). Discourses are used as rationalities that affect the knowledge and practices of constructing reality (STEVENSON 2009). Therefore conflicting practices and arguments of actors may rest upon more than one discourse. The central goal is to examine how actors argue and try to enforce their understanding of reality, the argumentative rationality, in the context of controversies. Societal reality is grounded in the actions of actors which are embedded in structural contexts that enable, constrain and shape agency at the same time. Hence, *Giddens*’ understanding of duality of structure is translated into the understanding of discourse. Similar to structures, discourses are the product of agency but have structuring capabilities simultaneously (OCKWELL & RYDIN 2006). In that sense, “interests cannot be taken as given *a priori* but are constituted through discourse” (HAJER 1995:51); they are the product of prior discursive practices and interplays. For HAJER (1995) human interaction is the central moment of communication where arguments and contradictory constructions of reality are exchanged. Conflicts over the interpretation of reality of offshore wind farms

become argumentative struggles “in which actors not only try to make others see the problems according to their views but also seek to position other actors in a specific way” (HAJER 1995:53). In the context of controversy, the discursive position of individual or collective actors is secured or altered through the rules inherent in their discursive practices that constitute the legitimacy of their position (HAJER 1995:51). Rules, conventions and legitimate modes of expression have to be “constantly reproduced and reconfirmed in actual speech situations, whether in documents or debates“ (HAJER 1995:55). So, discourse functions as a rule as well as a resource for actors.

This is where HAJER (1995) basically departs from *Foucault* who sees actors as products of discourses and not as their producers (MÜLLER 2008), whereas *Hajer* ascribes a certain agency to subjects who are capable to draw on, appropriate and manipulate discourses as a resource to enforce goals but also to challenge current discursive hegemony by means of storylines.

#### **2.4.2 Truth, rationalities and storylines**

Different actors affected by offshore wind farms or involved in their planning “are likely to hold different perceptions of what the problem ‘really’ is” (HAJER 1995:43). So, there are different definitions and representations of a given problem, which even leads to the constitution of different issues over offshore wind farms. Those issues are grounded on divergent understandings of what truth is. There is no universal and single truth, as famously argued by FOUCAULT (1980:131): “Truth is a thing of this world: it is produced only by virtue of multiple forms of constraint. [...] it is the issue of a whole political debate and social confrontation”. What is accepted as truth is conditional and discourse-dependent. Truth is relational to the practices and knowledge fought out in discursive struggles.

A helpful tool for grasping conflict-constituting discourses is the notion of storylines. Storylines are generalised narratives that allow actors to give meaning to social and physical phenomena and that serve as means through which actors seek to impose their constructions of truth and views of reality on other actors (HAJER 1995). Actors who operate within a certain discourse make use of storylines while communicating ideas that are encapsulated in the discourse. Particularly in conflict situations, actors do not draw on complex discursive systems, which are evoked through storylines

instead. Thus, storylines serve as argumentative remedies in interactions and “finding the appropriate storyline becomes an important form of agency” (HAJER 1995:56). By utilising storylines actors do not just refer to a certain problem; they also (re)define it. Storylines play a key role in the structuration of knowledge and the positioning of actors and provide tools to construct problems and conflicts. Storylines provide the arguments and are some sort of “narrative that allows actors to draw upon various discursive categories to give meaning to specific physical or social phenomena” (HAJER 1995:56), such as the siting of offshore wind farms. Conversely, storylines are also a useful tool to examine the argumentative patterns that constitute conflicts.

All actors who invoke, utter and refer to a particular set of storylines that are disposed around a particular discourse coalesce to a discourse coalition. Hence, a discourse coalition is bound together by storylines. Discourse coalitions become relevant, “if a common discourse is created in which several practices get a meaning in a common political project” (HAJER 1995:65). A discourse coalition of actors shares the usage of common storylines. So, it is the storylines and not the actors that become the focus of analytical inquiry. It is about how actors make sense of and give meaning to a phenomenon and claim truths. Although actors in discourse coalitions share a set of storylines, they may have their own interests. Each storyline includes knowledge claims and representations of reality about what is perceived as true. Storylines and discourse coalitions are the key elements of argumentative struggles over the definition of reality. Opposing discourse coalitions conflated by storylines can also be found in the localised debates about the contested siting of offshore wind farms. Doing a discourse analysis and identifying central storylines is assumed to help understand the values, beliefs, motivations and arguments of actors as constitutive elements of offshore wind farms conflicts, as they are supposed to have a strong presence in wind farm debates (JESSUP 2010).

However, it is the researcher who identifies and demarcates discourses and storylines upon which he or she draws on later research stages. So, the initial identification of discourses has a vital effect on the course and findings of the research. Therefore, the mosaic of discourses and storylines is also an analytical construct (KELLER 2008:127) through which societal phenomena are condensed and analysed. It is to decide which discourses will be the focus of research. Elements of a discourse may

be articulated in and across various data sets (KELLER 2011b). Identifying discourses and storylines in the field portrays them more clearly and makes them more observable in the conflict context (SHARP & RICHARDSON 2001).

## **2.5 Conclusion – Thoughts on an outline of a space-sensitive discourse analysis to examine conflicts**

The previous sections served to outline how space, practice and rationalisation matter in space-related conflict situations and the category of ‘space’ has been harnessed as an additional element for the exploration of conflicts over offshore wind farms. The constitution of particular spaces is highly intertwined with the enforcement of particular social realities (GLASZE & MATTISSEK 2009). It is not space itself which is relevant in the context of space-related conflicts, but the communication about space, amongst other social realities, and its various representations in the communicative process; the semantics of space. Physical and spatial realities are constructed to the same extent as social realities and truths. Such an understanding starts from the premise that the production of space “is integral to the production of society” (MASSEY 1999:10). Diversely constructed social and spatial realities cannot only be described as the causes of conflicts, but ultimately produce the conflicts between conflicting parties (GLASZE & MATTISSEK 2009). So, discourse analysis may not only be a useful approach to conceptualise specific truths and constructions of realities, but also to “examine how space is socially constructed and contested” (LINNROS & HALLIN 2001:392). Space can be directly linked to social practice and the question is here how we utilise ‘space’ in conflict practices, as ‘space’ cannot be conceived as being independent from discursive context of ideas, imaginations and interests. Therefore ‘space’ cannot be understood as an extra-discursive entity and its meaning becomes only significant as a result of discursive practice related to a particular spatial area. But this also implies that different discourses may produce different ‘spaces’ of the same territorial area. An overlapping of space-related discourses entails conflicts.

“Characterising arguments and engagement as discourses help unveil the hegemonic ways of arguing” (JESSUP 2010:23) in a conflict. It is not about the determination of right and wrong, but the argumentation-specific forms of constructing reality. And the construction of spatial conditions belongs to this reality as any other phenomena

at stake. With regard to (space-related) conflicts it can be argued that discourses facilitate a better understanding in terms of the argumentative rationality that people bring to a discussion (HAJER 2006). Moreover, “political conflicts often transcend a simple conflict of interest” (HAJER 2006:66). This also means that conflicts are not just about individual interests and goals, but also about the different meanings that actors attach and ascribe to particular situations and places etc. and in which these relate to their reflection and understanding of the situational context (society, politics, everyday issues). Translated into the research project, these ideas can be directed to the problem of how wind farms, spatial conditions and regulatory frameworks of planning are discursively constructed by affected stakeholders and how their rationales are incorporated into the local debates about offshore wind farms. A particularly space-sensitive discourse analysis may reveal the operation and functioning of the linguistic constructions of place, spaces or events as well as its amalgamation with practices and institutions. These constructions are also deemed to be grounded in particular interests that emerge in a conflict situation. But, as suggested above, “interests cannot be taken as a given a priori but are constituted through discourse” (HAJER 1995:51) and may change in different contexts and over time. Legitimate goals, interests and situated valuations are subject to the discursive conditions (GLASZE & MATTISSEK 2009). Ascriptions to spatial and socio-cultural conditions are versatile and contextual.

So, a discourse analytical framework, as envisioned for the research project on offshore wind farms, should consider the argumentative storylines which people invoke in the conflict situation and show how these are deployed and negotiated in the conflict. How this has been practically implemented will be the focus of the next chapter.

## **CHAPTER THREE: METHODOLOGY**

The theoretical framework discussed in the last chapter constitutes the foundation of this research. The importance of a profound and reasonable theoretical groundwork becomes particularly inevitable in qualitative empirical research which is pointed towards the investigation of social realities from a human point of view (FLICK et al. 2004). Qualitative research attempts to discover the social world through the lens of humans, which will principally guide the research on space-related conflicts. As discussed in the previous chapters, space-related conflicts are constituted through contrary human interests and actions that, in turn, are grounded on various perceptions, attitudes, and subjective representations of physical and social realities. How space-related conflicts can be methodologically and practically analysed will be revealed in this chapter.

The following sections will discuss the methodological foundation and the research-practical implementation of the previously designed research questions and theoretical perspective.

### **3.1 Research Perspective: Qualitative empirical research in Human Geography**

As stated in the previous chapters, social reality is diversely and steadily constituted through human actions, communication processes and their interpretations. In order to obtain knowledge of this “pluralization” and “diversification” (FLICK 2009:12) of the social relations a research approach is required which does not take quantifiable models or hypotheses for granted. Instead of starting with theories and models, different research concepts are required to examine the context of social realities qualitatively. Social and subject-bound constructions can be comprehended in a better way with the help of a qualitative research approach that includes an active interaction and communication with the field (FLICK 2009).

Theoretical knowledge is, by all means, indispensable for the guidance of empirical research, but the objective of qualitatively oriented research is not necessarily always to verify existing theories, and to engender absolute truth. HERBERT (2010:70) also addresses the problem of the “entrance of theory” into the research and argues for a

rather balanced emphasis of theory and empirical work, insofar as both should complement each other in the research process.

In qualitative studies new knowledge is mostly inductively derived from the empirical results, but its coherence of comprehension can also be corroborated by a theoretical frame. However, the premise of qualitative research is that while there might hypothetically be an objective and real world, this reality cannot be objectively conceived and is only relevant in terms of social constructions (FLICK 2004). So, the focus of qualitative research is on the constitution processes of reality, the practices and interactions of humans in their everyday lives and their underlying meaningful interpretations and constructions of reality. Therefore, qualitative research attempts to investigate social constructions, i.e. to explore individual positions, experiences and interpretations, which are supposed to be most appropriate for the required knowledge of this research.

Without taking into account all the different positions and subtleties in qualitative research (see FLICK 2009), another relevant feature of empirical qualitative research is the individual case as a starting point by looking at the perceptions, attitudes and practices of individual subjects in the first place and by performing generalizations or comparisons only in a second step (FLICK et al. 2004:8). Case studies are applied to reconstruct, interpret or compare empirical particularities of a certain theme. So, the procedure basically follows an open and inductive strategy of inferring knowledge and developing theories about the diversity and plurality of social realities from empirical data. Another feature of qualitative research entails the direct engagement and communication of the researcher with the people under research so as to gain immediate and first-hand knowledge. This is because the “basic access to the social world is the accounts that people can give of their own actions and the actions of others” (BLAIKIE 2010:90). The research process involves a mutual subjectivity, the subjectivity of the researcher and of those being studied. But the direct interference with the field also bears dangers as well as dilemmas that need to be carefully considered when approaching the research field. This point will be elaborated later again.

If the foundation of qualitative research is combined with objectives of human geographical research, few more consequences for the research project of space-

related conflicts occur. Within the realm of qualitative research in Human Geography the focus is also directed towards the investigation of different imaginations and constructions and their implications in the context of spatial or space-related themes. Qualitative geographical research aims at the reconstruction of phenomena and events of the social world from the perspective of involved people alike. The empirical bases are subjective constructions of the situational context through actors who are directly or indirectly involved in the events at stake. The data used by the researcher are “constructed in specific cultural, political and economic contexts which influence their character and content” (CLOKE et al. 2004:42). A qualitative human geography asserts the claim to understand and to make use of these plural subjective constructions in order to reconstruct and understand space-related processes, actions and conflicts (REUBER & PFAFFENBACH 2005). According to WERLEN (1997) such a deliberation should consider and refer to the interplay of subjective interests, institutional norms and rules as well as the significance of physical-material conditions. But, as elucidated in Chapter Two of this work, physical-material conditions do not become relevant as a substantial or pre-existing entity in a geo-deterministic sense, but obtain their significance only through meaningful ascriptions in specific situations and contexts of actions. In order to understand the circumstances leading to the conflicts of interests over offshore wind farms, it is necessary to reconstruct underlying perceptions, experiences, aspirations and actions of people involved as well as the structuring events and institutions.

In a nutshell, a qualitative research methodology in Human Geography facilitates the disclosure of the constructionist characteristics of spatial conditions and practices, processes and also conflicts, and highlights the interplay of individual interests as well as societal and physical-material conditions.

### **3.1.1 Anticipated knowledge**

The previous discussion leads to the following questions: Who are the conflicting actors and how do they pursue their interests? What discourses become relevant and shape the conflict situations? What meaning do spatial conditions carry in conflict situations?

With regard to the theoretical considerations so far, the answer to these questions has to consider the involved actors as a point of origin. It is their knowledge and their



activities which are constitutive to conflicts. The research objects of space-related conflicts are addressed in terms of their societal constructedness, their symbolic meanings and representations which form the basis people draw on in their everyday activities (SMITH 2001). In terms of qualitative research the world is conceived as “an assemblage of competing social constructions, representations and performances” (SMITH 2001:25). Discrepancies and frictions in the different representations of reality are deemed to be essential in constituting conflicts. Exactly this depiction comprises the knowledge that is anticipated for obtaining a deeper understanding of the nature of space-related conflicts in general and the opposition to offshore wind farms in particular.

The ambition of this research is to consider the processes from which the different interpretations evolve into different viewpoints. So the existing interpretations of the social and physical-material conditions are in the focus of the anticipated knowledge. These understandings and ascribed meanings of the context are produced and maintained through processes of human interaction and are embedded in discourses on which people draw within the process of social interaction (PHILLIPS & JØRGENSEN 2002, BURR 2003). This precisely involves the consideration of the role of different discourses in shaping attitudes. In order to provide a certain degree of transparency of the knowledge construction, I draw on the orientation of the participants. Knowledge and themes are predominantly derived from what participants say. So the researcher lets the data speak for itself and only intervenes insofar as he or she systematically organises and analyses the structure of the data in terms of putting it in relation to what other data sources say.

Since qualitative research does not usually strive to achieve representativity or quantifiability, of the results, the focus is more on gaining new knowledge about a problem and plausibility in the explanation of a specific case. However, in a comparative study stressing commonalities and contrarities can make a significant difference. The comparison of different case studies means the acquisition and consideration of information from several empirical sources which do not necessarily imply a need for a quantification of the results. It rather broadens the locally and contextually limited view of one individual case study and allows the search for a typology of a problem across different contexts in order to draw potential conclusions for practical solutions of the problem.

### **3.1.2 Epistemological research direction**

The epistemological interest of the research is in line with the research-practical implementation of the study and it can be classified as a mixture of an inductive and abductive research strategy. The idea of induction refers to a research process containing data collection and analysis in order to develop generalisations from the empirical data, which might be even further advanced to new theories and laws. In contrast to a deductive epistemology, the goal is not to verify theories or hypotheses.

Although an inductive strategy seems to be more common in qualitative research, an abductive strategy provides an approach that is deemed to be more relevant and reasonable for the exploration of conflicts over offshore wind farms that are grounded on stakeholder interests and actions. An abductive research strategy can be used to describe the context and meaning of everyday activities by taking the accounts of actors as a starting point. It incorporates the “meanings and interpretations, the motives and intentions, that people use in their everyday lives, and which direct their behaviour” (BLAIKIE 2010:89). Such a strategy, basically, enables the researcher to scrutinize the circumstances and backgrounds of certain actions or events by stressing the view of the involved people, the insider perspective. This epistemological direction allows for questions about the reasons why people do what they do. It also guides the identification of conflicting arguments as well as their adjustment and reproduction. Such a strategy coincides with REUBER’s (1999) assumptions about the formation of space-related conflicts, based on divergent stakeholder interests, which was illustrated before. The reality that is constructed by the actor is to be described by the researcher.

An abductive strategy is also open to and may be continued towards the integration of different or contrasting contexts to elaborate further comprehensions. Hence, a comparative study can be reconciled with such a strategy. But in a final step abductive research logic ideally follows the translation of the lay knowledge, i.e. the perception and the experience of actors, into more technical and scientific descriptions (BLAIKIE 2010:90). In contrast to inductive reasoning, an abductive approach is characterised by incomplete evidence, which means that additional information could either validate or nullify a diagnosis or interpretation. But according to REICHERTZ (2004) abduction is also an attitude and conviction with

which the researcher approaches the data to seek for new findings, but not to crave for the ultimate truth.

The objective of the research is not just to shed light on the formative conditions of conflicts over offshore wind farms, but also to infer practical outcomes for addressing future conflicts. Derivating policy suggestions can be assigned to an inductive strategy through which general descriptions derived from empirical findings are additionally reinterpreted in practical terms. Although the study across two different cases seeks to identify similarities and comparable patterns, it cannot be assumed that the findings are generalisable. Thus, the identified conflicts and underlying storylines in this research reflect the thematic foci insofar as they were communicated through the documents and interviews. The results therefore represent the perceptions, concerns and interests as highlighted and repeatedly articulated by various involved stakeholders from the selected case studies. But this also implies that other case studies may result in different conflicts and argumentative patterns or a dissimilar weighting of these issues. Although the conflict lines outlined in this research may well be identified in other wind farms projects, generalisations of the empirical findings cannot be taken for granted.

### **3.2 Methodological implementation**

After having described the methodological foundations of the research I will now detail the research process as well as personal experiences and problems during this process. The practical implementation of the research comprised the acquisition and analysis of data.

There are basically three major sources to obtain or create data: (participant) observation, qualitative interviews and documents. Techniques of observation and interviews serve to create data, explicitly and uniquely for the research project, whereas the collection and analysis of documents or texts reflect material that exists independently from the research and has been created for other purposes than the research. According to FLICK (2009:15) the choice of methods should be determined by the object under study and the research questions directed towards the object. As stated above, such a premise is rooted in the methodological openness of qualitative methods. This discourse-analytical research on space-related conflicts predominantly

deploys qualitative interviews and makes use of the analysis of a wide range of documents that were created in the context of the establishment of offshore wind farms and their contestation.

A detailed description of the application of the methods and its practical implications will follow after a discussion of the use of international case studies.

### **3.2.1 Comparison of case studies**

According to KITCHIN & TATE (2000:217) a case study “allows a particular issue to be studied in depth and from a variety of perspectives”. HERBERT (2010:75ff) distinguishes three different ways to select case studies for qualitative research: representative, comparative and anomalous strategies. Making use of a single representative case study requires significant or typical characteristics which would allow transferability to and generalizations for other case studies, perhaps in different locales with similar characteristics. But this would deny the uniqueness of a context. Comparative cases include a small number of case studies which can be compared in order to carve out factors generating similarities or differences across different sites and contexts. The third strategy draws on extreme cases which are expected to provide knowledge that challenges previous assumptions. According to BLAIKIE (2010:192ff) the methods of selecting case studies are still a key element in ensuring a certain degree of generalizability of the cases in order to keep the relevance of the findings beyond the actual research site, i.e. case study. But, at this point, it is questioned whether there is a necessity to generalise the findings to maintain relevance beyond the case study or whether it depends on the objective and orientation of the research. With respect to the contextual understanding of the formation of conflicts a transferability of findings is certainly not achievable and not necessarily needed, as the final step of the comparative research is to elaborate on suggestions of how to address future controversies. It is argued that a comparative study of different contexts does not necessarily have to be accompanied by a generalisation of findings.

All wind farm case studies revolve around a planned or a completed erection of a contested offshore wind farm, but all differ in the local contexts. Moreover, the Scottish and the German case studies also represent two different national planning and policy contexts, which makes a comparison even more valuable. However, this

leads to the question of comparability. Although the context, in particular the location and size of wind farms, differs between the cases, they can nevertheless be compared. Valuable conclusions can be drawn not despite the contextual and locational differences, but especially because of these differences. It is deemed particularly useful to examine the formation of opposition in different institutional contexts in order to identify common factors and to draw inferences about more appropriate planning practices. The cases themselves do not have to be very similar, but the processes must be similar and comparable, and thus clearly defined (VOGELPOHL 2013), which is ensured by the existence of conflicts and the research interest in the formation of wind farm conflicts.

In this research, a case study is conceived as a single case from which specific and detailed information can be drawn and compared with other case studies by using certain methods. Thus, a case study is seen as a part of the research design, rather than a type of a research method as it has been defined by YIN (2003). In this research a single project of a built or planned offshore wind farm is regarded as a case study that is investigated individually.

Case studies have been selected in terms of the degree of feasibility as well as theoretical interest. The feasibility refers to the investigation of controversies evoked by a wind farm. This was ascertained by a pilot study in which documents were examined to identify contested offshore wind farm projects in Scotland and Germany. Such documents bore witness to an existing conflict situation and comprised newspaper articles, protest letters, official statements and diverse websites. Those publicly accessible documents were browsed in order to search for indications of an active rejection or adverse attitudes towards wind farm projects, which would make them controversial. So, several offshore wind farms were identified in Scotland that provoked protest which was portrayed in the media. The pilot study was completed by initial interviews with stakeholders of Scottish case studies to confirm ongoing controversies and the feasibility of having a more in-depth examination of conflicts.

The procedure of identifying case studies in Germany was developed differently due to the fact that initial research on planned offshore wind farms in the North Sea had already been conducted (BYZIO et al. 2005, GEE 2010). In particular, BYZIO et al.

(2005) have provided an early synopsis of initial conflicts over planned offshore wind farms that mostly draw on projects in the German North Sea. So, the focus was redirected to a wind farm project that was about to be built in the Baltic Sea, which had not been researched in detail before. The case study of the so called Baltic I offshore wind farm also attracted broad public attention, not just because of its promotion as being the first commercial offshore wind farm in German waters, but also because of its location relatively close to the shore.

Within the sampling process the Scottish pilot study confirmed the practicability of several offshore wind farms planned at the Scottish west coast. Yet the original sampling process was influenced by some external events that turned the focus away from wind farms which were dropped during an early stage of planning. As a result, the Scottish case study, Argyll Array, was selected because it was expected to be anomalous (HERBERT 2010) and because of the emerging opposition that could be accompanied.

The initially selected case studies in Scotland and Germany comprise:

- *Argyll Array Offshore Wind Farm, Tiree, Scotland (planned)*
- *Islay Offshore Wind Farm, Scotland (planned)*
- *Kintyre Offshore Wind Farm, Scotland (scrapped March 2010 by developer)*
- *Wigtown Bay Offshore Wind Farm Scotland (scrapped March 2010 by government)*
- *Baltic I Offshore Wind Farm, Germany (in operation since May 2010)*

Although the investigation concentrates on the Argyll Array Offshore Wind Farm and the Baltic I Offshore Wind Farm, the other projects were considered due to their anomalous and specific contexts which provide further information about the reasons for abolishing the wind farm plans and their links to existing conflicts. All case studies differ in the local context, in the manifestation of conflicts and in the stage of planning, but are to be compared on grounds of the types and characteristics of conflicts as well as the conflict-forming storylines. This serves to gain a better and broader understanding of current conflicts in Scotland and to compare conflict-related actions, whereas the consideration of a dropped Kintyre, Solway Firth and Wigtown Bay wind farm plans is especially anticipated to provide insights into

valuations of policy- and decision-makers. This valuable opportunity to comparatively integrate different wind farm plans is supported by the centralised screening and scoping as well as a common consideration of early planning stages for all proposed Round 2 wind farms through Marine Scotland. Despite these advantages, the wind farms dropped at an early stage were less suitable as appropriate case studies with regard to the intended consideration of conflict dynamics during subsequent planning stages.

### **3.2.2 Methods of data acquisition – tools of inquiry**

In the following section I discuss the strategies of data acquisition, both primary and secondary data. Secondary data material includes documents that were created for purposes other than the research project and thus reflect everyday interactions and communication without being influenced by the research. In contrast, primary data means material being directly produced for and within the research process, such as interview transcripts. Consequently, this material somehow reflects the purpose and the goals of the research as well as the conceptual categories the researcher invokes. The interviews as well as consulted documents are listed in the following tables. Moreover, this research draws on information from a wide range of other documents, such as policy papers, reports, assessments, websites as well as transcripts and minutes of meetings, which are listed in the Appendix 1. The acquisition of data also comprised three days of archival work at the licensing authority in Germany and two days of participant observation at consultation meetings in Scotland.

**Table 2: Interviews in Scotland and Germany****SCOTLAND**

<b>Organisation</b>	<b>Date</b>	<b>Location</b>	<b>Duration</b>
Tiree Community Development Trust	08/02/2011	Gairloch	1h 30mins
Kintyre Offshore Wind Farm Action Group	02/03/2011	Machrihanish	47mins
No Tiree Array	16/04/2011	Scarinish, Tiree	1h 15mins
Scottish Natural Heritage, Islay	20/04/2011	Bowmore, Islay	45mins
Islay Energy Trust	20/04/2011	Bowmore, Islay	1h 22mins
Scottish Natural Heritage, Offshore Wind Casework	09/05/2011	Battlby, Perth	1h 18mins
Monreith & District Action Group	12/05/2011	Whithorn	30mins
Keep Wigtown Bay Natural Action Group	16/05/2011	Edinburgh	55mins
Joint Nature Conservation Committee, Marine Advice Team	20/06/2011	Aberdeen	1h 13mins
Scottish Government, Marine Scotland, Offshore Wind & Marine Renewables	27/09/2011	Edinburgh	1h

**GERMANY**

<b>Organisation</b>	<b>Date</b>	<b>Location</b>	<b>Duration</b>
Staatliches Amt für Landwirtschaft und Umwelt (2 people, offshore wind farm licensing)	13/08/2010	Stralsund	1h 25mins
Tourismusverband Fischland-Darß-Zingst (general manager)	13/08/2010	Löbnitz	35mins
Prerow, Don Quichotte Action Group (former mayor)	13/08/2010	Prerow	1h 10mins
Minsiterium für Energie, Infrastruktur u. Landesentwicklung (Baltic 1, planning)	04/08/2010	Schwerin	1h 05mins
Bund für Umwelt und Naturschutz Deutschland (BUND), Rostock	04/01/2011	Rostock	1h 50mins



**Table 3: Consulted documents (representations and consultation responses)**

Scotland	Germany
<ul style="list-style-type: none"> <li>• Argyll &amp; Bute Council</li> <li>• Argyll Renewables Communities Consortium (on Draft Plan)</li> <li>• Communities Against Turbines Scotland</li> <li>• Keep Wigtown Bay Natural action group</li> <li>• Kintyre Offshore Wind Farm Action Group</li> <li>• Kintyre Offshore Wind Farm Action Group Newsletter, April 2011</li> <li>• Monreith &amp; District action group</li> <li>• No Tiree Array</li> <li>• Scottish Boating Alliance (on Draft Plan)</li> <li>• Scottish Natural Heritage (on Draft Plan)</li> <li>• Scottish Natural Heritage (Scoping Advice, Argyll Array)</li> <li>• Various citizens / local residents</li> </ul>	<ul style="list-style-type: none"> <li>• Amt Rügen West (community)</li> <li>• Bundesamt für Seeschifffahrt und Hydrographie, Federal Maritime and Hydrographic Agency of Germany</li> <li>• BUND</li> <li>• Bundeamt für Naturschutz (Federal Agency for Nature Protection)</li> <li>• Gemeinde Prerow (community) / protest group 'Don Quichotte'</li> <li>• Gemeinde Zingst (community)</li> <li>• Landesamt für Denkmalpflege Mecklenburg-Vorpommern (State Agency for the Preservation of Historical Monuments)</li> <li>• Landkreis Nordvorpommern (district)</li> <li>• Landkreis Rügen (district)</li> <li>• Local fishers</li> <li>• NABU</li> <li>• Public, various local residents &amp; businessmen</li> <li>• Tourism Association Fischland-Darß-Zingst</li> <li>• Wasser- und Schifffahrtsdirektion Nord (Waterways and Shipping Directorate)</li> <li>• Wehrbereichsverwaltung Nord (Military District Administration Office)</li> <li>• Western Pomerania Lagoon Area National Park Authority</li> </ul>

## ***Documents***

Documents contain official data that have been produced for specific reasons other than the research, and usually exist as text. Within the process of research those documents are only collected to obtain information about how social reality is documented and constructed in these kinds of data. That means that official data “do not provide complete or transparent pictures of social reality. Rather they are influenced and conditioned by the interests at stake in their production” (CLOKE et al. 2004:48). Such documents were produced in a context of communication and actions, in which they are to be interpreted as a goal-oriented means for the purpose of the interests of the actors (REUBER & PFAFFENBACH 2005). So they are not bias-free representations of absolute truth either (FLICK 2009).

Documents in this research can be divided into three main groups. First, there are documents that reflect the rationale for building offshore wind farms, which are created by governments or governmental agencies in order to justify the need of renewable energy facilities and to explain how this demand is fulfilled. Such documents and their communicated content “are the by-products of the process of governing and of the operation of large bureaucratic organizations” (CLOKE et al. 2004:43). They serve to communicate with and to distribute schemes to the public (e.g. reports, draft plans). These documents are supposed to represent the hegemonic discourse, emanating from governing institutions, and were thus used to identify the storylines that constitute the hegemonic discourse regarding the strategic purposes of establishing offshore wind farms. Secondly, a wide range of documents attempt to challenge the construction of particular wind farms and were created by the public or non-governmental organisations in order to present their attitudes and interests regarding the offshore wind farm plans in general or a wind farm project in particular. The latter ones can be classified as artefacts of counter-discourses which act at the micro-level. The third group of documents contains reports created during the planning processes of wind farms, which reflect rather practical information about specific wind farms, such as scoping reports or environmental impact assessments.

As the documents were variously used to gain an initial overview of the existing conflicts, when examining certain conflicts and argumentations in detail and deriving hegemonic and counter-discourses the method of utilizing documents should be seen

“as a complementary strategy to other methods, like interviews” (FLICK 2009:255). Documents such as protest letters and consultation responses were mostly used to identify the storylines that are invoked by opponents and statutory consultees to point to conflicting issues. Thus, they served to gain initial information about prevailing counter-discourses which could be addressed during the interviews in more detail.

Relevant documents presented particular stakeholders (advocates and opponents) and their interests and attitudes towards the wind farms projects, and thus reflected the individual and subjective views of actors. But representations and consultations responses were also a valuable source for the identification of various meanings ascribed to spatial structures. Opponents often included and constructed locational qualities and spatial particularities in consultation responses in order to stress their incompatibility with wind farms. Finally, consultations responses also hinted at perceived planning-related inconsistencies and therefore addressed the role of the structural level within space-related conflicts.

In summary, the wide range of documents also represented the different discourses that shape the debates around offshore wind farms in terms of the hegemonic (governmental) discourse and the discourses of resistance. Another criterion related to the authenticity of the documents. The documents were either directly produced by stakeholders or the information was partially reproduced by other documents such as newspaper articles. A very important, but also restrictive, criterion was associated with the access to the documents.

For the Scottish context almost all documents are available for the public and accessible online. These comprised governmental documents about the role and the establishment of offshore wind farms, developer reports on specific case studies and, most important, many protest letters and representations from the public and organisations<sup>7</sup>. Many of the documents were produced during the planning and licensing process. That means that the documents were instantly available or with just a little time lag after they had been produced.

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<sup>7</sup> There were several hundreds of consultation responses to the Draft Plan, which were accessible from the website of Marine Scotland. The vast majority of these representations referred to Kintyre, Wigtown Bay, Solway Firth and Argyll Array offshore wind farms.

The access to documents of the German Baltic I Offshore Wind Farm ran into difficulties as they were not available online. This was probably due to the fact that the licensing process had been held some years prior to the time of the research and had already been finished by the time the data acquisition began. Moreover, the lack of accessibility for the public can also be explained by different bureaucratic schemes in Germany. These circumstances required a different procedure. During an initial interview with the approval agency, which ran the licensing process of the Baltic I Offshore Wind Farm, I was told that many corresponding documents of the licensing process are stored in the agency's archive. Although access to the documents was assured at the beginning, inspection was only allowed after several requests<sup>8</sup>. Eventually some documents, such as statements towards the offshore wind farm plan, including essential stakeholders, could be searched and collected from the archive of the agency, whose staff was helpful after all and acted as a gatekeeper.<sup>9</sup>

### ***Qualitative Interviews***

Interviews are a widespread method to obtain first-hand information on social realities as they are constructed by people. This instrument necessitates direct contact and interaction with the subjects to be studied and is always, to a certain degree, co-shaped and manipulated by the presence and the interference of the researcher. This influence can be controlled, to a certain extent, through the adaptation of different standards of interviews and the types of questions. Interview methods can be distinguished on the basis of the standardization of the interview (see FLICK 2009:150ff).

This research made use of semi-structured and expert interviews. A semi-structured or semi-standardized interview is an interview type that is less structured by the researcher in order to leave sufficient space for the interviewees to disclose their subjective stock of knowledge about the issues under study. Interview questions were prepared prior to the interview and listed in an interview guide. Those questions referred to themes the researcher regarded as relevant to be addressed to and discussed with the interviewees. The guidelines for the interview served to organize the group of themes, issues and questions and to help to cover all the desired topical

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<sup>8</sup> Those documents mostly comprised representations from the public and comments from statutory consultees, such as authorities whose jurisdiction is potentially affected by a wind farm project.

<sup>9</sup> A list of documents that have been included in the study is listed in the appendix.

areas. Semi-structured interviews excel by the useful practice of different types of questions (FLICK 2009).

Firstly, interview questions were designed in an open way, which made the answers likewise broad and open. This allowed the acquisition of complex subjective theories as well as of implicit and explicit assumptions expressed by the interviewees (FLICK 2009:156). Open questions were answered spontaneously with the help of immediate knowledge at hand, which fosters subjectivity and avoids a pre-formulation of answers. However, this condition could not always be guaranteed as a few interviewees requested a list of questions before the interview. Besides open questions, more structured questions allowed me to direct the interview to particular topical areas and problems that were not considered as important by the respondent. So, interview questions were also prepared with reference to initial findings that had been obtained from the prior analysis of relevant documents, in order to address recurring issues that were deemed significant. But the relative openness of semi-structured interviews also left enough space for the interviewees to touch upon aspects which had not been considered before and to point towards aspects they rated as important. This openness provided me with the opportunity to address questions that only arose during the interview.

A specific type of semi-structured interviews is the expert interview. The goal of expert interviews is to obtain knowledge about a certain topic from people representing a certain group, field or profession (FLICK 2009:165). They, therefore, provide specific knowledge. They provide expert knowledge on specific issues, even though it is subjectively construed and embedded in discourses. But this also implies that alleged lay people can be seen as experts of a certain topic because of their affectedness and involvement in the controversies. Thus, it is argued that also lay people can be classified here as experts due to their personal experiences, competences and capacities in a certain field of activity, with which they have to cope in their everyday lives. With regard to this research project experts could be divided into two groups of stakeholders: actors from the local public who can be conceived as the lay people and, administrative actors who serve to reveal the mechanisms of the institutional framework.

The goal of interviews was to obtain information on the subjective rationales of the stakeholders, their interests, arguments and reasoning, which reflects the subjective level of the conceptual framework. Such information served to gather and to reconstruct the context and structure of meaning, on which the interviewees draw their knowledge and arguments. Not least, this leads to the usage and reproduction of certain storylines by certain actors. So, the information that was obtained from individual interviews represents the micro-level of the discourse on which certain actors draw to reproduce particular storylines. Other than documents, interviews revealed a deeper insight in the patterns of argumentation and interpretations of events and social reality. Moreover, the constructions of the spatial conditions in the conflict situations could be traced with the help of interview information. This is also because questions could be actively oriented towards this direction without having lapsed into a too theoretical terminology. In contrast to documents, interviewees could be directly questioned about particular meanings of spatial conditions that were raised during the interview, but also previously referenced in consultation responses and protest letters. Expert interviews were also used to inquire into particularities and deficiencies of the existing planning frameworks and role of other actors. Statutory consultees and authorities were able to provide critical insights in the implementation of the planning regimes for offshore wind farms, whereas the public and local opponents gave evidence of how they perceive and evaluate the implementation of the planning framework, which both presented the basis for a critical reflection of the structural level of space-related conflicts.

The focus of this research is on different stakeholders who are, in one way or another, involved in and constitute conflicts over offshore wind farms, or who feel somehow affected by an offshore wind farm project. This is a rather vague definition of a group of people and would result in a vast and unclear number of potential stakeholders. Thus, a certain sampling design for selecting interviewees became necessary.

### ***Sampling process***

The process of choosing appropriate interviewees should be conducted by targeting “people who are likely to have desired knowledge, experiences and positionings, and who might be willing to divulge that knowledge to the interviewer” (CLOKE et al. 2004:156). Thus, based on this precept, the acquisition of interviewees was guided

by a theoretical and selective sampling, through which a relatively small amount of experts could be approached, who present knowledge about the different case studies. In general, this sampling procedure is rather gradual, just like the entire research process, which means the selection of interviewees happens step by step during the process of data acquisition (FLICK 2002). Here the systematic selection was oriented towards the research questions with awareness of the theoretical framework. The selection of interviewees was conducted on the basis of the chosen case studies. As a starting point, documents, such as newspaper articles or websites dealing with the case studies, were skimmed in order to identify people or groups of people who give opinions and represent different viewpoints towards the offshore wind farm projects and, thus, actively participate in the conflict and the discursive struggles. In doing so, people who are supposed to provide a broad insight into certain case studies were selected and interviewed at first. The results of the initial interviews were then used to identify more stakeholders who may provide expert knowledge on specific issues. Selective sampling, the purposive selection of important or typical informants, was particularly valuable for selecting archetypical interviewees, such as protest groups and environmental organisations, which play also a major role in disputes over onshore wind farms.

Additionally, snowball sampling was adopted at the end of the interviews in order to disclose more helpful informants. This also opened up opportunities to acquire further interviewees who did not attract attention and were not considered through theoretical sampling. In some cases, snowball sampling had the advantage of interviewees being able to establish contacts from their networks. But, on the other hand, in many cases, the recommended person was already sampled, indicating a successful system of theoretical sampling. Lay people of the general public were not chosen, even though they had certainly particular attitudes towards offshore wind farms, too. Of course, the applied type of sampling obstructs a census-like acquisition of informants and information, but this was not the purposive objective of gaining data.

### ***Contacting interviewees***

The procedure of contacting selected interviewees was coordinated equally for the Scottish and the German case studies. As a first step, an interview request was sent by a postal letter including a leaflet summarising the research and indicating the

necessity and significance of the participation of the interviewees. The letter was sent either to their private home or office, depending on their background and position. The strategy of sending an official letter provided further options of making contacts via email and phone, in case there was no reply to the letter. But in most cases the respective persons responded shortly after via email and expressed their willingness and availability. In a few cases the request was forwarded to other people who were supposed to be more relevant for the research purpose. Only two people or institutions respectively had to be reminded of the request by using email and telephone. In a second step, a date and time was arranged via phone or email. At that point, the consent to record the conversation was asked for, with respect to possible preparations for the interview. The necessity for recording the conversation was always rationalised by the simplification of a later analysis and by me being a non-native speaker with respect to the Scottish case studies. All fifteen interviews were permitted to be recorded. The experience was that public stakeholders were more accessible and open-minded than interviewees representing the administrative level. Two more important interviews were planned but could not be conducted due to the reluctance of the respective interviewees. Although willingness had initially been expressed, all efforts to arrange a meeting remained unsuccessful.<sup>10</sup>

### ***Conducting interviews***

The temporal organisation of the interviews depended on the availability of the interviewees, which resulted in many short periods of exercising interviews. The interviews were either conducted in the private homes, the offices or in public spaces.<sup>11</sup> The duration of the interviews lasted between 30 minutes and 1.5 hours,

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<sup>10</sup> This concerned a Community Liaison Officer of Scottish Power Renewables and a representative of the Argyll Array project from Marine Scotland. Both could have added valuable information on particular conflicts as well as on the interplay between the developer, the community and the planning authority. During a coincidental meeting on Tiree, the liaison officer agreed to be interviewed at a later stage, as he had obtained this position only a few weeks before that meeting, but was not available afterwards. The representative of Marine Scotland agreed to be interviewed only after the completion of the master planning process in order to avoid providing information before the official press release, but did not reply to further requests either. The reluctance of both stakeholders directly involved in the planning process could be associated with the current delays and uncertainties of the Argyll Array project.

<sup>11</sup> Due to the random locations of the interviewees all interviews in Scotland had to be organised individually between February and September 2011. The German interviews were organised in two clusters over two days in August 2010 and January 2011 and during another stay for archival work in May 2011. The interviews in Scotland took place in Gairloch, Machrihanish, Whithorn, Aberdeen, Perth and Edinburgh, on Islay and Tiree. Interviews in Germany took place in Stralsund, Prerow, Rostock, Schwerin and Löbnitz, all situated in the federal country of Mecklenburg-Vorpommern.



depending on the number of questions, the stock of knowledge and the availability of the interviewees. At the beginning of the interviews in Scotland every interviewee was provided with and asked to sign a consent form stating their voluntary participation and the permission to record the interview. For interviews in Germany, the interviewees were made aware about their voluntary participation<sup>12</sup>.

In some cases the interviewees requested to be informed about the interview questions in advance. They mostly justified it by a lack of time and a better preparation for the conversation. So, in a few cases a list of questions was posted to the interviewees some days prior to the interviews. But those questions were unstructured and more general. Needless to say, this also influenced the course of the interviews by decreasing my efficacy as an interviewer. Moreover, this provided the interviewees with the chance to reconsider their position and to make up responses which might not necessarily reflect their real arguments, as spontaneous replies would have done.

When the data acquisition for the Baltic 1 case study commenced in summer 2010 the wind farm had already fully been approved and the construction started with the erection of the first turbines. So the main disputes and conflict-related activities had already settled and dated back to the years between 2004 and 2006. That is why the narrations in the interviews referred back to the times of the planning procedures and the views of interviewed stakeholders had also changed and softened when looking back at the events and experiences of these years. This happened to be different in the Scottish case study as the building of the Argyll Array was on the everyday agenda while the data acquisition was undertaken.

As already mentioned, the content of the interviews was guided by pre-formulated themes and questions of different types. But the sequence was always changed so as to guarantee an optimal openness of the conversation. In the end usually all questions were covered unless they had become obsolete due to the results of previous questions. Sometimes suggestive or leading questions were asked in order to turn the attention to a particular topic and to enforce a particular answer.

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<sup>12</sup> This was because most of the German interviewees refused to sign the form, as they had not been familiar with such a procedure. They questioned the need to sign a form to confirm their willingness. Taking part in the interview was seen as a confirmation of their willingness.

The process of interviewing as a research practice can also be affected by the language background, which is an especially critical fact in a research across linguistic borders, which has been already considered elsewhere (HANTRATIS 2009, SMITH 1996, CRANE et al. 2009). Although most questions for the semi-structured interviews had been prepared beforehand, occasional linguistic deficits during the English interviews certainly affected the course of the conversation. This may have caused a lack of incisiveness in comparison to the German interviews, in particular during interviews with authorities due to the required bureaucratic language, “correct terminology and subtle phrasing” (HELMS et al. 2005:244). This problem was addressed by listening carefully to the interviewee, by adopting particular terms and by rephrasing particular questions.<sup>13</sup>

### **3.2.3 Methods of data analysis**

#### ***Pre-organisation of material and transcriptions***

A necessary step before progressing to the analysis of data was to transcribe the interview that means transforming the spoken words into the form of a text (FLICK 2009:299). The interview could then be treated as a text, which is important for deriving analytical categories inductively from the material, and which helps to develop discourses and to reconstruct storylines and argumentative patterns. Since the focus was on the content of what had been said rather than linguistic subtleties and because of the length of the interviews, only the spoken words were transcribed as precisely as possible without any exact reproduction of psychological considerations and accentuations of pauses, silence or vocal changes etc. In addition to the process of transcription, notes on initial content-related thoughts and comments were also taken.

Another problem of multilingual research became apparent because the interviews about Baltic 1 were conducted in German. Due to the massive time commitment the

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<sup>13</sup> Besides the interviews as the central source of data acquisition, I also attended and observed a community meeting on Tiree that was concerned with the Argyll Array proposal. This meeting was organised by the TCDT and served to present and discuss various effects of the Argyll Array on the island. It also included a poster exhibition about potential effects on specific services and infrastructures, such as transport, schools and housing.

interviews were not translated completely (word by word), which also might have caused a certain loss of the deep structure and meaning of uttered content<sup>14</sup>. The practical analysis of the interview material will be described in the following section.

### ***Strategy of analysing storylines***

The discourse analytical framework can be supplemented with “non-discursive analytical theories” and approaches (PHILLIPS & JØRGENSEN 2002:153). The combination of a discourse analytical framework with other methods is due to the lack of an explicit method to undertake the analysis of discourses in Human Geography (DITTMER 2010), as in any other field of social sciences. This is because a discourse analysis is no stable process stressing different thematic priorities which emanate from the specific research questions. But most practical implementations of a discourse analysis commonly turn to two main foci, the context and the text (DITTMER 2010). With regard to the goals of the current research and the understanding of the duality of discourse the context refers to the identification of the actual discourse that shapes the conflict situation, and the text may refer to the reproduction and conflict-related adjustments of the discourse. The first represents the macro-level and the latter the micro-level of discourse and both levels are interrelated through the reciprocal understanding of discourse.

The mutual analysis of both aspects was implemented following the suggestions for the qualitative analysis of texts given by JACKSON (2001). This procedure allowed an interpretational analysis built on textual data that is obtained from interviews. Its aim was to extract meaning from the spoken or written text or, in other words, to describe the ways in which the text produces meaning. The process included several steps that were modified to fulfil the research purpose of looking at conflicting discourses.

The first step contained the coding of the material in order to label and mark particular sections for a subsequent analysis. These sections or phrases were annotated with interpretative codes or categories inferred by the researcher or by abstractions of the spoken words (JACKSON 2001:201-202). Hence, the coding process consisted of a theory-driven and content-driven induction of categories. On

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<sup>14</sup> That is why the analysis of the German interview text was edited in German and only important paragraphs used for citations were translated as accurately as possible. This should ensure an equal and harmonized analysis of the bilingual data.

the one hand, the constructionist and space-oriented / action-oriented theoretical background shaped my interest and, thus, my interpretations that were extracted from the material. Theory-driven coding also implies that another researcher from a different perspective may identify a different set of categories (JACKSON 2001:208). But on the other hand, categories were also developed from the material which ensures the consideration and significance of subjective articulations regarding the conflict situation. Such categories were individually developed for each document, while the theory-based categories are akin across the documents. This first step also included taking notes of initial thoughts and important aspects. This step is dedicated to start demarcating major discourses and identifying storylines that structure the discourse.

The second step included another reading of the material across the interview transcripts and protest statements to identify the prevalence of certain themes and conflict dimensions. The goal of the third step was to make sense of the themes by grouping and regrouping the categories. This deals with the further derivation of storylines and the question of how these make sense of conflicts.

The fourth step was concerned with the task of understanding the discourses. Another thorough reading of the transcripts identified the dispositions of the actors and addressed the question of how they make sense of the previously developed discourses. This basically entailed the reconstruction and confluences of storylines, interpretations and patterns of argumentation that form a discourse. In the final step of the document analysis the discourses were referred back to certain actors.

This procedure was particularly applied for analysing interview transcripts and some representation letters in order to carve out storylines and their conflict-related renditions. But this was not possible for all kinds of documents.<sup>15</sup>

The analysis of the interview texts was supported by the use of the qualitative data analysis software *Nvivo*. However, the use of the software only answered the purpose

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<sup>15</sup> Scoping reports, governmental reports and a few statements of protest were usually too extensive and addressed several and irrelevant topics. So these documents could not be assessed to the same extent as the interviews and were mostly used to portray the hegemonic discourse. The aim of the consideration of institutional documents was to reconstruct the argumentative patterns for examining the hegemonic discourse and the storylines for legitimising the building of offshore wind farms.

of organising and keeping track of the vast data material and was not applied to further analyses. Thus, the categories created in *Nvivo* only mirror the inductive work of the researcher.

### **3.3 Limits of methodology**

Some of the complications have already been pointed out, but the employment of the methods and the subsequent analysis involved some more difficulties. The limitations accompanying the methodology are of a practical and epistemological nature.

Practical limits arise from the comparative structure of the study. Due to the different contexts of the cases, a complete comparability in terms of equal characteristics and features of the case study was neither guaranteed nor desired. The key dissimilarity is related to the physical features of the offshore wind farms, such as the location and size of the wind farms, but also in terms of contextual features, such as the planning and policy context. Yet the latter differences can be seen as an advantage that renders an international comparative study worthwhile. Another critical aspect involves the temporal arrangement of the study. *Foucault* arranged his studies about the discursive order and discursive struggle originally in a historical perspective (KELLER 2011a). Taking a retrospective view was not possible for the comparative investigation, since both case studies refer to different stages of planning and building. The Baltic I offshore wind farm in Germany has already been built and the Scottish wind farm is still at an early stage of planning. In more theoretical terms, an *ex post* perspective has to be combined with an *in itinere* study. However, this reflects the topicality of the study and the currently ongoing processes in Scotland have rather been accompanied by the research than objectively reviewed. The interviews in Scotland have to be viewed under the circumstances of an *in itinere* study as the interviewees reflected upon current processes and conditions without a potential temporal objectivity that was given for the Baltic 1 case study. Therefore, it seems practically complicated to speak consistently of the reconstruction of storylines and discourses, if the chronological framing of the research impedes taking a historical and retrospective angle. It is suggested to speak of portraying or delineating existing storylines and narratives instead.

A practical problem of qualitative interviews arises from their highly subjective content. Subjectivity is, of course, necessary and inevitable for the anticipated aims, but it also impedes the rigour of research. An epistemological constraint of hermeneutic-interpretative<sup>16</sup> research is that the research objects are only comprehensible from a subjective perspective and not in their entirety which makes them not directly tangible for the researcher. This involves the danger of misinterpretation and misunderstanding. Although a hermeneutic approach opens up the opportunity to reflect on constructed and varying knowledge and its consequences in specific contexts, such as conflict situations, it endangers the credibility and rigour of the research.<sup>17</sup> The risks and uncertainties that come with a constructionist epistemology will now be illustrated a bit more in detail.

The researcher is guided by his or her own epistemological stance as well as the paradigmatic conditions of research which may also obstruct different knowledge that could be achieved from other perspectives or by means of other approaches. Thus, the constructionist position points out that the attained knowledge is just one representation of reality, among others. In fact, this should not lead to an anything-goes and everything-is-possible understanding of research, but it merely points towards a diverse derivation and interpretation of the results that are linked to the underlying perspectives which may even facilitate manifold knowledge of and insight into a problem. In other words, the epistemological position determines the knowledge the researcher is able to attain. Therefore, different approaches delineate the same problem differently by emphasising certain aspects and disregarding others, which should not be conceived as competitive or mutually exclusive. Of course, when the different forms of knowledge are combined it broadens the understanding of a topic (PHILLIPS & JØRGENSEN 2002:155). With this in mind, and as previously mentioned, the theoretical framework in which the research is rooted can, to a certain degree, foster the comprehensibility of the interpretations of the researcher and make the results more reasonable and transparent for the reader. Only a profound and guiding theoretical frame distinguishes the scientific reconstructions of research from

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<sup>16</sup> Such a procedure aims at the interpretation and understanding of a research object by deducing its meanings as they are subjectively constructed and experienced by other subjects.

<sup>17</sup> In order to avoid epistemological deficiencies and to achieve a better transparency of arguments, the study makes use of and heavily relies on quotes from interviews and documents, particularly in the analytical chapters five to nine. They are supposed to bridge the gap between the subjectivities of the research objects and the interpretations of the researcher.

a merely naïve everyday reading and interpretation of social issues (REUBER & PFAFFENBACH 2005:117). However, the reader is also able to draw own conclusions from the results in compliance with their personal perspective on the issue. In that sense, the present research is supposed to contribute to current debates and previous studies with the aim of broadening the knowledge about a problem (conflicts over renewables) by deploying a specific approach. But after all, this implies again that a universal truth is unattainable.

According to GIDDENS (1984), the notion of “double hermeneutics” has an effect on all qualitative research. This dilemma of social sciences points towards a double subjectivization of the research outcomes. The findings are nothing else than a re-interpretation of already subjectively constructed discursive knowledge provided by the research subjects. This relationship may cause difficulties regarding the credibility and rigour of the findings. Therefore a critical reflexivity is demanded to provide a high degree of intersubjective confirmability (HAY 2000:32). Thus, it is crucial to keep the research process, in particular the analytical strategy, as transparent and consistent as possible. A better transparency of how the findings was achieved by a rigid coding guideline which reflects the categories, paraphrases and examples that were extracted from the data material.

Similar to the notion of double hermeneutics, the researcher is also captured within discourses that shape his or her thinking, understanding and thus the entire research process. This leads once more to the social constructionist claim of the impracticality of gaining access to an ultimate and objective truth, since it is not possible to take up a positional view beyond the social world and discourse (PHILLIPS & JØRGENSEN 2002). Nevertheless, the critical researcher is obligated not to reproduce only the hegemonic and powerful discourses in a non-reflected manner, but to address the marginalised views and discourses. That was practically addressed by looking at discourses of resistance.

As previously mentioned, discourses are not accessible as real entities. They are rather defined by criteria established in the course of the research process and are subject to the content of the empirical material. This also applies to the formal and content-related features that characterise a discourse. Both the demarcation and the content of a discourse reside with the discretion of the observer or researcher. Hence,

the definitions of the discourses rest on the responsibility of the researcher and are thus constructed entities (PHILLIPS & JØRGENSEN 2002:143-144). That means that other researchers may derive and consider other discourses or, more likely, may define the inferred discourses through different terms. So the explored discourses and their storylines should be treated as research-specific, but with wider applicability indicated. This is even more essential since the research is based on specific case studies, although some storylines are recurring beyond the cases, which is again a fundamental aspiration (and outcome) of a comparative study. A demarcation of discourses is crucial for framing the study, deriving the results and for the distribution of any practical outcomes to the wider public or related experts.

### **3.4 Experiences from the field, self-reflexivity and positionality**

The direct interaction with people who are under study is a strategic strength of qualitative methods but involves also an ethical dilemma that needs to be considered carefully. “The researcher’s own positionality – his or her subjectivity and positioning – will represent a significant contextualisation of his or her role in co-constructing and then interpreting interview data” (CLOKE et al. 2004:129). My personal positionality played an active role in several occasions of collecting data. As the research focus is on conflicts the researcher is sooner or later confronted with the question of taking sides. Sometimes I was asked by the interviewees about my own attitudes towards offshore wind farms. I tried to react in a pragmatic way without taking any sides. Counter-questions of the interviewees referred to my possible affiliation with companies, the government or a strategic embeddedness in certain research projects or funding schemes which could have affected my independence and objectivity. This had no impact on the course or the content of the interview since I was able to confirm my independence from any of those. Also, being a non-coastal resident, my objectivity could be maintained, as I do not bear any personal relation, neither to the Hebrides nor to the German Baltic Sea coast. However, my personal unrelatedness and unaffectedness may maintain a practical objectivity but might also obstruct a more thorough emotional understanding of the problem. Although I tried to keep an “outsider position” (FLICK 2009:111) my personal opinion of the demand of offshore wind energy certainly played an unavoidable role. An unintended swing has occurred in my personal stances towards the issues under research. A particular motivation for researching wind energy disputes stems from my personal clear pro-renewables and pro-wind energy attitudes, with which this



research has initially been approached. Despite these attitudes the research was conducted in an impartial, unbiased, reflective and holistic way without personal valuations and prejudices. The swing in my attitudes does not include a turn to an anti-wind energy position. But the actualities of offshore wind energy planning as experienced by involved actors opened up a more critical view on the realities of wind energy planning and on the consideration of the resistance to wind energy. Moreover, researching in a non-native language may have also augmented the personal outsider position and insider/outside relations (HELMES et al. 2005) while conducting interviews in Scotland.

Besides the intricate justifications of what I was doing, more positive aspects occurred. The almost entirely positive responses of interview requests are, to some extent, certainly due to the fact that the requested people were in a conflict situation and wanted to expose and distribute their opinions and views regarding the offshore wind farm topic in general and the specific wind farm projects in particular. So the research and the interviews were certainly seen as another opportunity for the actors to advertise and communicate certain viewpoints and the researcher could be used as a medium to do so. The communicative context of the interview could be strategically exploited to achieve certain effectualness. This leads to the assumptions that the content and the course of the interviews were situationally and strategically pervaded and the interviewees tried to integrate their own goals into the conversation. This aspect had to be considered during the interviews and the research, but was also anticipated by leaving enough space in a semi-structured interview for including contents that seemed to be explicitly important for the interviewees. Without anticipating any results, wind farm opponents from the public were open-minded to explain and distribute their viewpoints, as they often felt these are not heard during the legal processes. In contrast to the relative openness of the public and non-governmental organisations, representatives of the administrative level behaved rather in a formal and reserved manner in order to preserve distance and adhere to bureaucratic commitments.

Another question that came up during the interviews was related to my personal interest in the topic and the international study. I was sometimes forced to justify of what I was doing and why I was conducting this research. Scottish interviewees wondered why a German was doing research in Scotland. In turn, German

interviewees asked why I was affiliated with a Scottish university, doing research in Germany.

After having described the theoretical framework that guides this research and the applied research methods, the following chapters will set out the empirical background and findings of the research. In doing so, the next chapter will describe the hegemonic discourse that frames the offshore wind farm policies in Scotland and Germany and will then introduce the two case studies of Argyll Array and Baltic 1.



## **CHAPTER FOUR: EMPIRICAL EVIDENCE**

Having established the main foci of this research and the theoretical and methodological approaches taken to achieve the research objectives, the following chapter outlines the background of offshore wind farming in Scotland and Germany and describes both case studies as the empirical research foundation. In this chapter, the hegemonic discourse of establishing offshore wind farms in Scotland and Germany will be deconstructed first. After that the policy context and the legislative framework of offshore wind farm planning will be outlined. The main sections of this chapter will finally be concerned with the description of the two case studies in order to present the key stakeholders, their concerns and their practices. The goal of this chapter is to provide the reader with the empirical background necessary to understand the analyses presented in Chapters Five to Nine.

### **4.1 The hegemonic discourse – Offshore wind farms in Scotland and Germany**

*“Fukushima has fundamentally changed my attitudes towards Nuclear Power Plants” ... “With this future project we all together can amalgamate ethical responsibility with economic prosperity”* (Federal Chancellor Angela Merkel on the topic of energy transition in the aftermath of Fukushima Daiichi nuclear disaster; June 2011)

*“Our waters are estimated to have as much as a quarter of Europe’s potential offshore wind energy, and we are perfectly positioned to develop the technology that will power this renewables revolution”* (Scotland’s First Minister Alex Salmond in response to a renewed critique from Donald Trump, 2013)

The energy policy strategy of Germany is grounded on three pillars: security of energy supply, future market opportunities resulting from developing of renewables, and climate protection, and the compliance with obligations regarding international climate protection goals. All these issues converge in the national sustainability strategy, in which the sub-project of offshore wind power is supposed to be the most important element for ensuring the energy supply (BMU<sup>18</sup> 2002). According to the

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<sup>18</sup> Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit [Federal Ministry for the Environment, Nature Conservation and Nuclear Safety]

national sustainability strategy, goals of the German government include the increase of the share of renewable energy in the supply of electricity of 30% by 2020 and a long-term goal of 50% by the year 2050, which should be achieved by shifting the energy production to a sustainable basis. This is supposed to contribute to international and national standards to reduce greenhouse gas emissions of 40% by 2020 below the level of 1990 (BMU 2009).

The energy strategy in Scotland is geared towards the establishment of a low carbon economy. The transition towards this goal is embedded in a wider strategy of supporting economic recovery and draws on policies for energy efficiency and renewable energy. This strategy is framed by ten pledges that encompass a number of related areas ranging from energy generation, efficiency and transport aimed at the creation of jobs, economic growth, reducing carbon emissions and addressing climate change (THE SCOTTISH GOVERNMENT, TSG 2009). The latest Scottish targets regarding the incorporation of renewables in the national economy and the output of energy from renewables were enshrined in the '2020 Roadmap for Renewable Energy in Scotland' in 2011. This plan expounds the ambitious energy targets of Scotland of 100% electricity from renewable sources, 10% heat demand from renewables, 30% energy demand from renewables by 2020 (TSG 2011). About half of the UK's renewable energy output is already generated in Scotland (TOKE et al. 2013). In light of climate change, these efforts are also reflected in the goals to reduce carbon emissions. The Climate Change Act sets out world leading targets to reduce carbon emissions of 42% by 2020 and 80% by 2050 relative to the baseline of 1990 (TSG 2011), making climate change a crucial driver for energy transition.

The motives in Scotland to bring about energy transition comprise economic recovery and growth, ecological modernisation and climate change. All these aspects are framed by the ruling Scottish National Party's (SNP) overarching goal to strive for independence from the UK and to become a leader in and exporter of renewable energy and related skills and technologies. Implications and constraints of this wider strategy are outlined by TOKE et al. (2013).

Key storylines synthesising the rationales of energy transition in Germany and Scotland are illustrated in the following sections.

#### 4.1.1 Climate Change storyline

The German Government acknowledges the existence of climate change as one of three<sup>19</sup> global trends influencing climate and energy issues, and renewables are regarded as the only way to address these trends:

“Ultimately, there is no alternative to restructuring the energy supply towards renewable energies and energy efficiency. These technologies are the only way forward if we are to confront the global megatrends of population growth, ongoing industrialisation in the developing countries and emerging economies, resource scarcity, and climate change.” (BMU 2011b:7)

Since an increase of greenhouse gases has scientifically been identified as a key catalyst for a changing climate, the global discourse of climate protection entails practices to reduce CO-emissions including the overarching goal to create a low carbon society and economy. So, targets of the Federal Government for climate protection comprise a cut of greenhouse gas emission by 40% by 2020 and 55% by 2030, in comparison to levels and measurements of 1990. As a result, Germany should be largely greenhouse gas free by 2050 through a decrease of emissions of 80-95% in comparison to 1990 (BMU 2011b:8). However, those targets only refer to the measurements of 1990 and do not clearly divide between the production or consumption side, so that Germany’s target to be ‘largely greenhouse free’ by 2050 remains unspecified.

“These technologies [renewables] are the most effective weapons we have in the fight against climate change because they supply energy, but produce practically none of the greenhouse gas carbon dioxide. They offer both industrialised nations and developing countries the same opportunities to generate the energy they require themselves and so invest valuable currency in their own development – permanently. They can help these countries reduce their dependence on dwindling fossil resources, especially oil and gas, and even defuse crises and wars in those regions with the largest fossil deposits.” (BMU 2011a:6)

According to this quote, practices directed towards climate protection are therefore somehow constructed as a public good, since they provide fundamental needs for making modern life possible, such as energy, employment and peace. However, the implementation of definite climate targets is not merely grounded on national convictions, but is also embedded in a global scope. Germany’s climate targets are framed by European obligations that have to be met. But in turn, “Germany has an interest in ensuring that the European Union adopts ambitious targets and action”

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<sup>19</sup> The other two are growth of population and ongoing industrialisation.

(BMU 2011b:35) too, as the German targets are generally more ambitious than EU-wide obligations and those in some other member states.

Since climate change is a global problem, the Federal Government justifies its pathway with referring to countries that likewise face this challenge and for which Germany can even be a model due to prior experiences in establishing renewables (BMU 2011b:34). Furthermore, climate change is associated with the increasing global dependence on scarce fossil fuels, which embodies risks for conflicts and wars as the demand for oil and gas is currently increasing in industrialised and developing countries. So climate change and the need for renewables are also instrumentalised by pointing to the dual opportunity to address climate change as well as potential future conflicts and social problems at once. But climate change also provides future economic opportunities that are being negotiated now and Germany as a nation is now required to position itself as not to forfeit the opportunity to become a key player in producing and establishing renewables to tackle climate change. A globally oriented view comes also to light when pondering environmental impacts of renewables. Here, climate-protecting effects are supposed to have a very positive impact on nature conservation as climate change is deemed to cause various negative impacts for biodiversity. Therefore, renewable energies “are generally to be viewed positively on account of their climate protection impact”, but “should not cause any other inappropriate, negative impacts on nature and the environment” (BMU 2011a:27). Negative local impacts are not denied, but the positive effects on global climate compensate and outweigh locally bound nature conservation concerns. In terms of wind farms, local impacts should be addressed and managed by “instruments at the local authority level” (BMU 2011a:28). This suggests the possibility of a controversy over the entrenchment of national schemes at the local level, which fundamentally encompasses siting conflicts.

Although Scotland, being a smaller country with smaller economy, does not contribute to global carbon emissions to the same extent as Germany or the rest of the UK, Scotland also declares climate change as a current pressing threat, as Scotland’s climate has already been changing over the last decades (TSG 2008a). The Scottish premise regarding climate change is that “the cost of doing nothing to address climate change is far greater than the cost of acting” against climate change (TSG 2010:11). This statement can be used to divide the stance of Scotland into two

separate yet equal underlying motives. On the one hand, this carries an idealistic environmental message. The costs for the environment and the costs of environmental damages will be much higher than the actual costs that are required to mitigate the effects of climate change. On the other hand, “Scotland is in a position to not only adapt to and mitigate the effects of climate change but also to optimise the economic opportunities that arise from those actions” (TSG 2010:10). From an economic perspective, a later adaptation to the effects of climate change will cause higher costs than the measures to be taken to avoid severe effects of climate change by starting to reduce carbon emissions. Both strands of this premise demand Scotland to act now rather than dealing with the effects of climate change. The mitigation of climate change will also create positive side-effects for the Scottish economy by switching to renewables (see ecological modernisation storyline, 4.1.2).

However, this understanding also implies that climate change will also adversely impinge on various sectors of the Scottish economy. In contrast to the German rationales which tend to encompass climate change and its implications from a global perspective, the Scottish storyline explicitly refers to national costs and effects of not tackling climate change. The impacts of climate change are supposed to cause disruptions to communication systems and energy sources and to lead to extreme weather conditions that will bring losses of water supply, premises and infrastructures (TSG 2010). Therefore, Scotland has to ensure to “understand the risks and opportunities presented by a changing climate” (TSG 2010:14). The Climate Change Act obliges Scotland to develop a Climate Change Adaptation Framework which supports both adaptive actions to impacts of climate change as well as actions to create a low carbon economy. The Act fundamentally presents the statutory framework and duties for the reduction of greenhouse gas emissions.

In summary, climate change is constituted as one of the most pressing challenges for Germany and Scotland. The practical implementation of climate targets and energy targets is therefore mutually dependent and bears future challenges and opportunities. The reliance on fossil resources has to be overcome to mitigate the effects of climate change and to create a sustainable energy supply that replaces the use of finite sources of energy.



#### **4.1.2 Ecological modernisation storyline**

In both countries, ecological motives (nuclear phase-out, climate change) for the transition to renewable energy are accompanied and affirmed by economic arguments. The political framing of energy transition is not only grounded on the ecological imperative and the legitimacy of renewables is not only justified by ecological goals and international agreements, but also through economic calculation. Only a political-economic framing of renewables makes ecological objectives possible and vice versa. In other words, the wind industry in Germany would not have developed as an economically important industry without the ecopolitically motivated promotion of and incentives for renewables. The turn towards a low carbon economy in Scotland is indispensably linked to economic growth.

Hence, the fundamentals of the wind energy industry seem to be ecologically and economically amalgamated (BYZIO et al. 2005:47). In Germany, the amalgamation of ecological and economic ambitions and their strategic development, without excluding one or another, are scientifically reflected in the approaches of ‘Ecological Modernisation’ and ‘Sustainable Development’, both of which emphasise a viable co-evolution of environment and economy (i.e. humans and nature). Such an ecological modernisation discourse widely shapes European policies and finds also evidence in the justification and the practices for the establishment of renewables in Germany and Scotland.

As the German renewables sector has been massively growing over the last two decades, it is desired and expected that this process progresses continuously and drives the energy transition. The growth of the sustainable energy sector is meant to bring about energy transition which is induced by an interweaving of national regulations and incentives and market dynamics. The German government sees its remit in providing the policy framework, structures and incentives to initiate and maintain this process:

“The green economy is based on a commitment to a sustainable, low-carbon society. An economy which has been modernised in this way helps to increase competitiveness, creates employment and training opportunities, and improves the quality of life. Energy efficiency and renewable energies can make a key contribution to the transition to a green economy. In short, investing in climate protection is an ideal response to the global mega-trends which must be managed today.” (BMU 2011b:29)

Energy transition is equated with modernisation of the energy sector and the development of a green economy, which clearly draws a line between the previous and future processes of energy production and consumption of resources. The growth of renewable technologies is meant to successively substitute the present carbon-intensive and nuclear energy industries, to create jobs in new industry sectors at the same time and to benefit the global environment in the long run.

In Scotland, the transition to a low carbon economy is accompanied by challenging economic and societal transformations. The development of low carbon innovation and technology is only achievable “through changing the collective behaviour of business, individuals, communities and the public sector” (TSG 2010:6). It is heralded that Scotland will have a “highly sustainable and prosperous economy where Scotland is a major player and beneficiary in the development of global low carbon markets” by 2050 (TSG 2010:6). The transition in the Scottish economy through the increased use and construction of renewables has mostly been exemplified with the creation of jobs as an indicator of economic growth. The creation of jobs is specified with numbers across energy-related businesses. It is expected that the low carbon economy could increase employment by 60.000 by 2020. This comprises 26.000 jobs in renewable energy, 26.000 jobs in low carbon technologies and 8.000 in environmental management (TSG 2010).

The crucial role of the Government is seen in regulatory support by providing the necessary infrastructure to secure the transition and to ensure funding and investments. This is done by setting carbon emission targets through the Climate Change Act, the provision of streamlined planning and consenting systems and by setting the legislative and regulatory framework in order to “incentivise low carbon investment and maximise competitive advantages” (TSG 2010:14). However, similar to the strategy in Germany, the central and local government as well as the activities of the wider public along with academic institutions are supposed to form the framework for a successful transition in Scotland. Research, innovation and development are seen as the fundamental groundwork to bring Scottish companies to the forefront of the renewables sector.

In summary, the practical implementation of the energy transition aims for a sustainable growth of the economy in which the anticipated development of offshore

wind farms is supposed to be well-integrated. However, having outlined ecological modernisation as a hegemonic storyline which frames the discourse of the development of renewables, the consideration of conflicts will later demonstrate that both, the ecological and economic perspectives, also allow other views and another way of looking at things. Ecological and economic arguments are brought forward to question the development of offshore wind farms at particular sites.

#### **4.1.3 Physical conditions storyline in Scotland**

A particular storyline in Scotland refers to its physical and geographical conditions. Scotland's geographic location and its long coastline foster the use of renewables to produce energy. Scotland has very windy conditions and strong waves and tidal currents, and is estimated to have 25% of Europe's offshore wind and tidal potential, and 10% of Europe's capacity for wave power (TSG 2011). Thus, Scotland is regarded to have "the natural resources to become the green energy powerhouse of Europe" (TSG 2010:10). Due to its large marine resources some parts of Scotland have been referred to as "the Saudi Arabia of marine energy" (BBC 2008). This storyline constructs energy as a quality and a part of the Scottish landscape (NADAI & VAN DER HORST 2010a).

This somehow implies that the Scottish Government will miss out on an excellent opportunity if it does not exploit its natural asset that gives Scotland advantages over other states. By exploiting its natural resources the Scottish Government aims at transferring the natural advantage into an economic advantage.

#### **4.1.4 Nuclear Phase-out storyline in Germany**

The necessity for the expansion of renewables has additionally been driven by the fundamental change in nuclear policy and the nuclear phase-out that was declared by the Social Democratic (SPD)<sup>20</sup> and Green (Die Grünen) government in 2000 and which should have been completed by 2020. But a lifetime extension of nuclear power plants was declared in the coalition agreement of the current government consisting of Conservatives (CDU) and Liberals (FDP) in 2010, which could have possibly led to a complete withdrawal from the nuclear phase-out and which could

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<sup>20</sup> SPD (Social Democratic Party), CDU/CSU (Christian Democratic Union, Christian Social Union), Bündnis90/Die Grünen (Greens), Die Linke (The Left) and FDP (Free Democratic Party) constitute the main array of political parties in Germany that have usually been forming government coalitions on federal and federal state level respectively.

have also encouraged energy companies to refrain from investing in sustainable sources and thus endangered the planned increase of renewables.

But unexpectedly the Tohoku Seaquake on 11<sup>th</sup> March 2011 made the government rethink and fundamentally change its positions towards nuclear energy. The seaquake and the following tsunami caused heavy damage at Japanese nuclear plants, especially at the Fukushima-Daiichi nuclear plant which was almost completely destroyed with the result of leakage of radioactive radiation and particles. The Fukushima disaster has again posed the question whether the commercial use of nuclear power can be politically and socially justified. Fukushima strikingly recalled the risks of nuclear energy into the societal mind, but, however, “the risks of nuclear energy have not changed since Fukushima, but the perception of the risks has” (ETHICS COMMISSION FOR SAFE ENERGY SUPPLY 2011:11). Only three days after the earthquake the government announced a moratorium on nuclear power including a safety check of all 17 German nuclear plants, whereby the seven oldest plants were shut down during the inspection. Although Fukushima can be seen as the impetus<sup>21</sup>, this abrupt reversal of nuclear policy leading to the moratorium may not only be affiliated to the factual circumstances, but also to party-political tactics with regard to the then upcoming election in the federal country of Baden-Württemberg<sup>22</sup>. Despite this rapid turnaround the renewed rejection of nuclear power seems to be permanent because the lifetime extension was suspended and the 7 nuclear plants that were shut down during the moratorium will not be started up again.

Against this backdrop, the Fukushima nuclear disaster can be regarded as a discursive event that will deeply shape the debates and practices towards the realisation of energy transition and will impose pressure upon political decision-makers to make an expeditious transition. So, the reasserted rejection of nuclear

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<sup>21</sup> “Even though the commission for reactor safety has come to the conclusion that a catastrophe like the one in Japan can be ruled out in this country, the catastrophe of Fukushima has yet challenged our societal evaluation of risks and safety in respect of nuclear energy” (BMU 2012:14-15)

<sup>22</sup> This election in the aftermath of the Fukushima event resulted in the election of the first Green Minister-President in any of the German federal countries. Together with the fiercely contested and nationally debated reconstruction of the Stuttgart train station the Fukushima nuclear disaster is regarded as the trigger of the temporary boost of the Green party in Germany in 2011.

energy additionally frames and intensifies the need for a rapid transition to renewable energy in Germany<sup>23</sup>.

#### **4.1.5 The role of offshore wind farms in Germany and Scotland**

“Offshore wind energy is to be encouraged due to reasons of climate protection and the development of a sustainable energy supply” (BMVBS<sup>24</sup> 2009:16). This statement summarises the motivational forces underpinning the German government’s ambitions to expand offshore wind energy. The meaning of offshore wind energy is likewise embedded in the overarching climate change discourse, even though technical and economic storylines seem to prevail with regard to the implementation of the transition to renewable energy. Offshore wind energy is meant to have a positive effect in terms of labour market policy considerations as well as in terms of the decrease of local social conflicts due to the developments far from the coast (OHLHORST 2009:215).

There is the anticipated potential to cover 60% of Germany’s power generation through wind energy (BMU 2011a:75). Offshore wind farms are supposed to produce a capacity of 25.000 MW by 2030, which would cover 15% of the electricity production in Germany. Offshore wind farms seem to be predominantly considered with regard to the energy supply side. They are meant to substitute current fossil-intensive sources of energy production. The necessity for and the “great potential” of offshore wind farms are reasoned with economic and ecological constraints placed on wind power locations on land and the higher wind speeds offshore (BMU 2011a:76). So, the spatial conditions offshore as well as onshore are employed to justify the expansion of wind farms at the sea. According to BRUNS et al. (2011:299) “the start of the development of offshore wind power relied on the EEG<sup>25</sup>, the economic success of onshore wind power and the positive examples in Denmark” and was backed by an alliance of new actors from industry, energy companies and the Federal Government, whose ambitions were framed by the state’s commitment to climate protection.

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<sup>23</sup> In Scotland, the ruling SNP also opposes the continuation of the use of nuclear power. They oppose the building of new nuclear power plants in Scotland and signalled to phase out existing plants as they reach the end of their operating live.

<sup>24</sup> Bundesministerium für Verkehr, Bau und Stadtentwicklung [Federal Ministry of Transport, Building and Urban Development]

<sup>25</sup> Erneuerbare-Energien-Gesetz (German Renewable Energy Source Act)

In comparison to the building of wind farms on land, offshore wind farms are still regarded as very expensive. Higher costs and additional investments are caused by the difficult grid connection and underwater foundations of offshore wind farms. That is why policy-makers come to the conclusion that offshore wind turbines “should be as large as possible” to compensate the costs related to the distance from the shore and the water depth (BMU 2011a:80-81). But this also implies that the most economically viable wind turbine would be very large and close to the shore. The uncertainty linked to the high financial costs has recently been addressed by the introduction of a special programme in 2011 which provides a credit volume of 5 billion euros through the Reconstruction Loan Cooperation (Kreditanstalt für Wiederaufbau) “to facilitate the breakthrough of offshore technology” (BMU 2010) and to support small and medium-sized energy companies to get access to the offshore wind energy market and to evade the ‘oligopoly trap’ (BMU 2010).

The federal government pursues an ecologically compatible expansion of wind energy at the sea by avoiding ecological risks for the marine environment. This premise should be ensured through an innovative gradual concept to gain and apply knowledge successively. This involves pilot projects, monitoring and decisions about final configuration levels, whereby results of preceding steps have some influence on the following steps (OHLHORST 2009:218). Environmental concerns are also the fundamental reason why wind farms should only be concentrated in the EEZ, since vast areas of national parks, such as the Wadden Sea in the North Sea and the Lagoon Area at the Baltic Sea, are considered to be out of bounds (OHLHORST 2009:219).

In addition, it is also stated and considered that offshore wind farms cause an intervention in the marine environment due to their scale and due to the lack of experience in dealing with such a technology.

“Since offshore wind power generation represents a large-scale, long-term intervention in the marine environment, and the lack of practical experience means predictions about offshore wind farms’ impacts involve considerable uncertainties, the observance of the precautionary principle is of particular significance. After weighing up the interests in various forms of use, the German government has identified the first low-conflict areas to be considered as particularly suitable for offshore wind farms under current conditions during the start-up and initial expansion phases. These sites could provide 70,000 MW of wind power capacity.” (BMU 2011a:45)

This rather environment-economy-centric view underpinning the deployment of offshore wind farms excludes further social considerations, other than obvious site-specific conflicts of economic usage (e.g. fishing, shipping, mining, military uses). Therefore, only those site-specific interests seem to be taken into account when selecting suitable sites for offshore wind farms and when consulting stakeholders in the planning process. The weighing and identification of “low-conflict areas” is grounded on an anthropocentric view as other forms of economic uses are employed as criteria to exclude inappropriate sites and to look for suitable areas which do not show a concentrated overlapping of different uses. In addition to conflicting economic uses and environmental interests, visual aspects with regard to offshore wind farms are still considered, but regarded as ambivalent.<sup>26</sup>

“There are different personal opinions about the influence of wind turbines on the **visual quality of the landscape**. Some see a negative change to the landscape, while others regard wind turbines as a positive sign that energy policy is moving in a new direction and do not feel bothered by them. The conflict between different subjective perceptions ultimately cannot be resolved. From the view of nature conservation, the visual quality of a landscape is not purely a question of subjective perception, but material to the description of a particular habitat’s overall context. In so far as this is the case, arguments about the visual quality of landscapes also play a role in the selection of sites.” (BMU 2011a:82, emphasises taken from original source)

Visual impacts of wind farms are admittedly acknowledged but also reduced to a subjective problem that cannot be fully resolved. But given the environment-centric view the visual problem is deemed more relevant, so much that it may even be applied as a criterion for the selection of wind farm sites, although this explanation seems to remain rather opaque. Regarding the visibility offshore, it is rather assumed that “future offshore wind farms produce power out of sight, and the impacts on coastal residents are therefore minimised” (BMU 2011a:80).

Similar to Germany, offshore wind is also the principle technology in Scotland and the UK to meet the goals of energy transitions in terms of future energy supply. There are currently two offshore wind farms in Scottish waters. One wind farm is a

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<sup>26</sup> The Spatial Development Programme (Landesentwicklungsprogramm, LEP) of the federal country of Mecklenburg-Vorpommern states that “suitable areas were determined on the basis of and by considering all 28 spatial demands of usage” (MABL-MV 2005b:68). “The identification of suitable marine areas took place in view of the fact that priority uses (e.g. shipping, nature conservation) exclude the construction of wind energy facilities in particular areas [...]” (MABL-MV 2005b:68). This indicates that the selection process of suitable areas was based on the exclusion principle.

test site called Beatrice in the Moray Firth which consists of two turbines of 5MW each. The other one is Robin Rigg, the first commercial wind farm, situated in the Solway Firth. Robin Rigg consists of 60 turbines of overall 180 MW. Besides these initial efforts, there is a much higher potential of 5GW in Scottish Territorial Waters and a further capacity to generate 4.7GW in the offshore waters, before 2020 (MARINE SCOTLAND 2011b).

Similar to risk-related responses in Germany, the Scottish Government is also prepared to act as a guarantor “to underpin early-stage investment in high-risk areas like offshore wind and renewables where the private sector is not prepared to gamble” (TSG 2010:52). But definitive actions for this role are not yet fully established. However, all this frames an economy-oriented vision of the Scottish Government on offshore wind energy.

Nevertheless, offshore wind will play a crucial role in achieving the climate and low carbon targets, as it is the most advanced and ready option of all marine renewables. This significance of offshore wind energy becomes even more obvious as it is expected that “harnessing just one third of our offshore renewable energy potential could meet Scotland’s electricity needs seven times over by 2050” (TSG 2010:47). So, Scotland would also surpass targets of the UK and EU. Given these principles and expectations, MARINE SCOTLAND (2011b) created a ‘Sectoral Marine Plan for Offshore Wind energy’, which demarcates strategic aims for offshore wind across the Scottish coast, including:

- Maximise the contribution that offshore wind energy makes to renewable energy generation in Scotland
- Maximise opportunities for economic development, investment and employment
- Minimise adverse effects on people, other economic sectors and the environment, and
- Deliver offshore wind while complementing other forms of marine energy generation (Marine Scotland 2011:10)

Despite this orientation towards offshore wind, “the pursuit of renewable energy in Scottish Territorial Water should be balanced to ensure health and diversity of the marine environment and the ability of people to benefit from and enjoy the marine environment” (MARINE SCOTLAND 2011b:11). This implies that the development of offshore wind is also associated with challenges related to a sound and sustainable planning of individual projects that equally involves the licensing authorities,



developers as well as public agencies and the public. The Scottish Government does not deny that the broad promotion of offshore wind power engenders conflicts and problems that have to be addressed in order to maximise the offshore potential. The consideration of issues related to the planning of individual projects is ensured by Strategic Environmental and Socio-Economic Assessments, Habitats Regulations Appraisals and consultations. A first synopsis of local and national issues over offshore wind farms was produced by a Consultation Analysis Report (MARINE SCOTLAND 2011a) which documents the views of all kind of groups, people and stakeholders. This analysis is based on consultations for the short-term options of offshore wind farms in Scottish territorial waters representing the initial capacity of 5GW. Key conflicting issues that have to be considered and mitigated comprise impacts on nature conservation, visual amenity of seascape and landscape, shipping, fishing, built environment and marine archaeology as well as pollution risks during construction (MARINE SCOTLAND 2011a).

In summary, offshore wind energy in Germany and Scotland is constituted as a ready technology that can help supply energy right away, and that will have some positive effects on the reduction of CO<sub>2</sub>-emission as well as on the economy. But the large-scale development of this technology is still associated with unknown environmental impacts and socio-economic risks that need to be carefully considered.

#### **4.2 Policy context and legislative frameworks**

Germany has been renowned for being a pioneer in implementing wind power onshore due to its favourable political conditions. The federal political system comprises of the federal level (Bundesebene) and federal state level (Länderebene), whose interaction has established positive effects for the policy implementation and market introduction of renewables. Along with the federal system, SUCK (2008:169) regards the late liberalisation of the electricity sector, due to the German reunion and the challenge to integrate the East German electricity industry, as beneficial factors for the success of German renewable energy politics.

Due to the Scotland Act 1998 jurisdictions over the energy topic are divided between the UK and Scotland (WARREN 2009). Energy policy and regulations are responsibilities of the central UK government, while planning powers and the promotion of energy efficiency are devolved to the Scottish Government.

#### **4.2.1 Planning in Scottish Territorial Waters**

Since devolution, planning jurisdiction for the Scottish Territorial Waters has been assigned to the Scottish Government. Moreover, Scotland has exclusively devolved power for marine planning over the EEZ off the Scottish coast. Following the UK Marine and Coastal Access Act 2009, a new legislative framework for the marine environment was established by the Marine Scotland Act 2010. These provisions have been introduced to allow for a more effective management of competing demands in the marine environment and uses of marine resources. As part of these responsibilities Marine Scotland, the directorate of the Scottish Government in charge of the management of the sea, has undertaken a Sectoral Marine Plan for Offshore Wind in Scottish Territorial Waters (2011), which contains proposals for offshore wind developments at the regional level. The identification process of the most appropriate sites required a strategic environmental assessment (SEA) that included consultations with the public and statutory consultees and socio-economic assessments. These steps at this stage were conducted by the Offshore Renewables Planning and Policy Team of Marine Scotland.

The programme of offshore wind power in Scottish Territorial Waters began in 2008 when the the Crown Estate, which manages and leases land and sea of the UK, invited developers to nominate sites, which led to ten exclusive agreements for ten sites to progress to the application process for a license (JAY 2012a). The marine licensing process for renewables is enshrined in the Marine Scotland Act 2010 and conducted by the Licensing Operations Team of Marine Scotland. The licensing process involves the steps of pre-application, screening and scoping to develop the environmental impacts assessment, in order to identify likely environmental impacts of any development, which must be compiled in an Environmental Statement (ES). The ES has to be publicised to give the public the opportunity to present their views on the project and ES.

For large marine projects, pre-application consultation may become relevant in order to provide the opportunity for communities to become engaged in the decision-making process for a marine license. After the license application submission the application has to be locally and nationally advertised in order to provide any person with the opportunity to make representations (MARINE SCOTLAND 2012). Scottish

Ministers are the licensing authority and the Licensing Operations Team issues the license for successful application on their behalf. All developments to be established in Scottish territorial waters need to be granted a license. Reasons to revoke a license include “a change in circumstances relating to the environment or human health, increased scientific knowledge relating to either of the above matters, in the interests of safety of navigation; for any other reason that appears to Scottish Ministers to be relevant” (MARINE SCOTLAND 2012:6). This implies that Scottish Ministers will have the final say about building consent.

#### **4.2.2 Planning in German Territorial Waters**

The offshore area is generally considered as public space, in which different interests, claims and forms of usage meet and compete. Hence, offshore energy activities are also conceived as public, which necessitates a deliberation of other traditional uses of the offshore space to achieve a successful coexistence, and which makes permanent developments within the offshore sea subject to planning. The German spatial planning regime operates at several levels and is embedded in the federal system: Bund (federal/national level), Länder (federal state level), Region (regional level) and Gemeinde (local level). Spatial planning can be conceived as a “bottom-up” process with decision-making generally taking place at the federal state level. A federal agency, the Federal Maritime and Hydrographic Agency (BSH), carries out the application procedure and decides on the approval of offshore wind farm sites in the Exclusive Economic Zone (EEZ, 200 nautical miles). In contrast, the federal states are responsible for spatial planning in coastal waters within the 12 nautical mile (nm) zone that is included in the regional development plans and land development plans, respectively. Hence, there are basically two different legal frameworks and approval procedures for offshore wind farm development projects in Germany depending on the location of the planned wind farm.

The approval procedure in the EEZ is determined by the Federal Maritime Responsibilities Act (Seeaufgabengesetz) in conjunction with the Marine Facilities Ordinance (Seeanlagenverordnung, SeeAnlV). Approving wind farms in coastal waters is subject to another legal regulation as this area belongs to the German sovereign territory. Thus, the same approval procedures as on land are applied offshore, since the respective coastal federal states are responsible for licensing wind farms within the territorial waters. The approval and implementation are regulated by

the Federal Control of Pollution Act (Bundes-Immissionsschutzgesetz, BImSchG). The focus here will only be on the procedure for the territorial waters.

The construction of a cluster of at least three wind turbines requires an approach according to the Federal Control of Pollution Act (BImSchG), in the same way it is applied to infrastructure projects on land. This implies that there is no specific ordinance for constructing offshore wind farms in coastal waters and the same provisions apply as on land (WUSTLICH & HEUGEL 2006). The general purpose of this act is “to protect human beings, animals and plants, soil, water, the atmosphere as well as cultural objects and other material goods against any harmful effects on the environment and to prevent the emergence of any such effects” (BMU 2007:6). So this act rather deals with immediate effects of the proposed infrastructure projects instead of indirect consequences. The complex licensing procedure must be carried out by the responsible agencies of the federal states, usually based within the Ministry of Environment of the respective federal countries, and include several steps of public participation and an environmental impact assessment (EIA). The approval procedure following the BImSchG is a public procedure which necessitates public announcements about the projects and permits everyone to bring in objections against the projects. Also, complete environmental impacts being conducted in an EIA need to be considered and examined thoroughly. There is no need for further authorisations from further authorities as other authority decisions related to the installation are incorporated in the licensing process (WUSTLICH & HEUGEL 2006).

According to essential space-consuming developments on land, a regional planning procedure (Raumordnungsverfahren, ROV) conducted by the respective regional planning agencies (federal state) is additionally required, in which all relevant indirect impacts are ascertained, described and evaluated. First attempts to consider, cope with and settle conflicts of competing usages, economic effects and an assessment of interests are established in this step. This regional planning procedure usually precedes the approval procedure according the Federal Control of Pollution Act. Hence, two planning institutions on federal state level are involved in the approval of offshore wind farms in coastal waters. But due to large areas of natural preserves (e.g. Wadden Sea) and shipping routes at the German coast, offshore wind farms play a minor role within the 12 nautical mile zone and only a few have been

approved so far. Nevertheless, Baltic I offshore wind farm is one of the few wind farms in coastal waters.

### **4.3 Comparison of Planning Frameworks - Particularities and Constraints**

German offshore wind farm approvals are granted by different institutions using existing laws and regulations which have not been specifically created for approving offshore wind facilities. However, in order to improve the conditions for approving and planning offshore wind farms there have been amendments of the Federal Conservation Law (Bundesnaturschutzgesetz) and of the Renewable Energy Sources Act. As mentioned before, there is no specific regulation for the implementation of offshore wind farms within the 12 nautical mile zone. The approval is under the responsibility of the coastal federal states and is regulated by the complex Federal Control of Pollution Act, which is also applied to review impacts of other infrastructure projects on land. However, specific regulations exist for licensing technical facilities for energy generation in the EEZ, for which a federal agency (BSH) is responsible and elaborates standards and guidelines for wind farm developments. But respective laws and statutes lack in definitions and valuations, so that the final decision is left at the discretion of the BSH (PORTMAN et al. 2009:3601). Due to reasons of nature conservation and tourism, the majority of offshore wind farms are planned and approved further seawards in the EEZ (ZEILER et al. 2005). Just a few wind farms are allowed to be constructed at coastal water sites. But the greater distance from the coast is coupled with higher connection costs which have to be defrayed by the network operators. Thus, geographical conditions together with policy regulations impose financial tensions between the developers and the network operators.

In Scotland, planning of offshore wind farms is more centralised under the jurisdiction of Marine Scotland. The designation of priority areas for offshore wind farms in territorial waters is parallel driven by Marine Scotland and includes a strategic environment assessment. The subsequent licensing process at project level is individually run by a specific team of Marine Scotland and guided by particular statutory consultees. The licensing process includes an environmental impact assessment for the particular project. A marine plan and planning procedures for marine renewables have been newly created under the Marine Scotland Act 2010,

which replaced the Food and Environment Protection Act 1985 and Coast Protection Act 1949, in order to streamline consents for marine renewables under one authority. A particular feature of marine planning in Scotland is that the seabed is owned and managed by the UK Crown Estate, which grants a lease of the seabed to the developers upon the granting of a marine license for an offshore project. These circumstances led to particular issues at the early planning stages of Argyll Array and controversies over the ownership of the Scottish offshore space (see 9.2).

In conclusion, within the legal and licensing procedures the decision has to be made and balanced between the conflicting priorities of economic usage and environmental conservation and protection, regardless of where offshore wind farms are developed. Therefore the application needs to be reviewed by particular authorities and many other stakeholders of the offshore area must be included in the decision-making process. In Germany, a discrepancy in the participation in the decision-making process between stakeholders who are officially invited due to their expertise and stakeholders from the public who feel affected by the offshore wind farm is not conducive for a straightforward process. But the involvement of many agencies and jurisdictions at several levels make the process of authorising offshore wind farms complex and lengthy. In contrast, Marine Scotland aims to provide a decision on all application within nine months after submission of the application.

The consequences of these particular and different planning regimes will be further discussed in Chapter Nine. The following section will now turn the attention to the background of the two case studies.

#### 4.4 Case Study 1: Argyll Array Offshore Wind Farm

*“This proposal [Argyll Array] is a devastating death knell for the island of Tiree. It is environmental vandalism on a massive scale. It transforms the island into an industrial site of helicopters, trucks, hard hats, light and air pollution, and commercial hubbub. For the sake of the island, its people, its visitors, its nature, and the sanity of all of us, it must be opposed and rejected.”* (Consultation response, public, 2010)

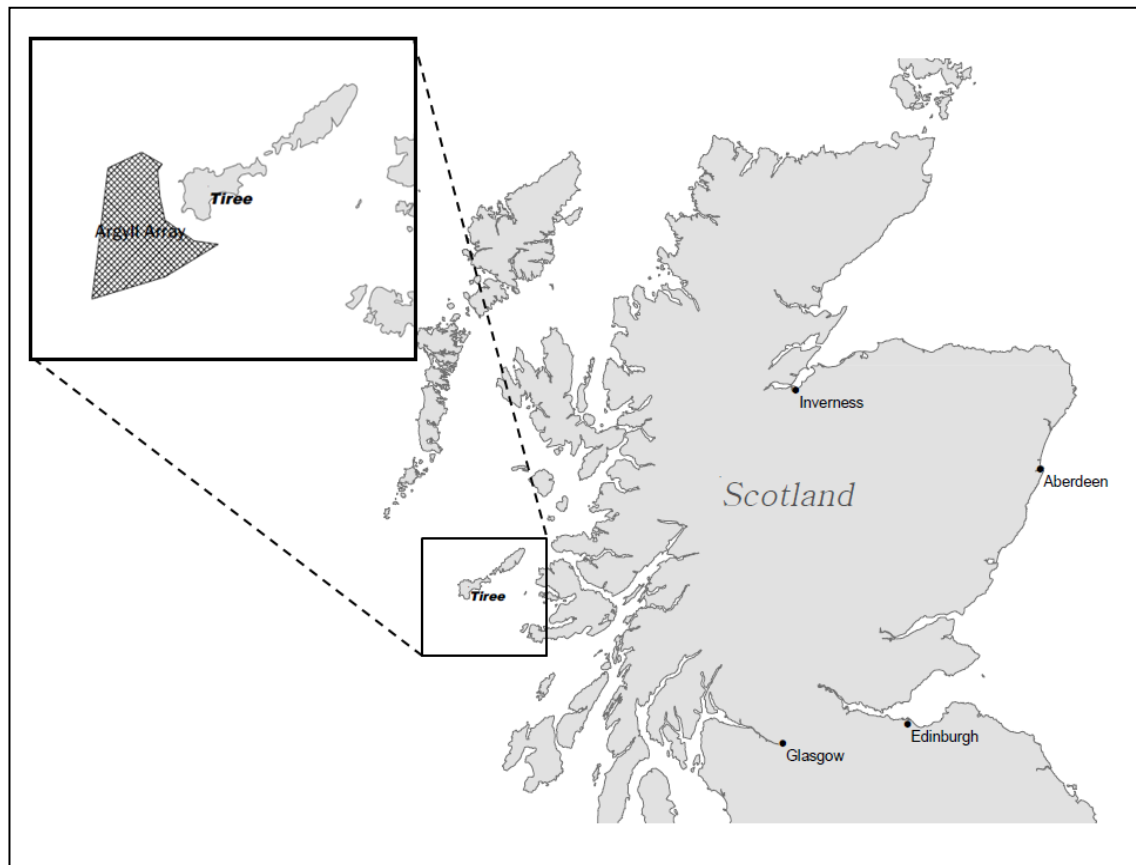
After having described the key discourse that frames the establishment of offshore wind farms and outlined the particularities of the planning schemes in Scotland, the following sections serve to describe the stakeholders who are involved in the conflicts that emerge from the national desire to site offshore wind farms in Scotland. In doing so, the proposed Argyll Array Offshore Wind Farm, which is meant to become the largest Scottish offshore wind farm, serves as a first case study for the depiction of involved stakeholders, their interests and practices related to this offshore wind farm. Like Baltic 1, the proposed site of Argyll Array is also located within the 12nm zone, which is a crucial factor for a transnational comparison of wind farms despite their dissimilar dimension and size.

In summer 2010, when the research and data collection started the development plan for Argyll Array was only at an early stage. By that time the scoping report had already been submitted by the developer ScottishPower Renewables (SPR) for requesting a scoping opinion, and a socio-economic impact assessment for all offshore wind farm plans in Argyll & Bute had already been initiated. But this was also the time when the first discrepancies had come to light and initial conflict-related practices were executed as well as the action group against Argyll Array was founded.

That is why the following depictions must be seen in the light of an *in itinere* study, which cannot provide a complete overview over the conflicts as they are part of still continuing processes. So the research rather presents, based on the principles of qualitative and discourse analytical approaches, one version told about a particular period of time in which the plan and the conflicts over Argyll Array have emerged, developed and manifested, negotiated, but not settled. Likewise, the interviews, on which most of the results and interpretations draw, have to be viewed under the circumstances of an *in itinere* study as the interviewees reflected upon current

processes and conditions without a potential temporal objectivity that was given for the Baltic 1 case study.

After the historical development of the Argyll Array proposal, the following sections will describe the key stakeholders who are involved in the contention over Argyll Array as well as their interests and action strategies.



**Figure 2: Location of proposed Argyll Array (initial layout)**

#### **4.4.1 Historical Context**

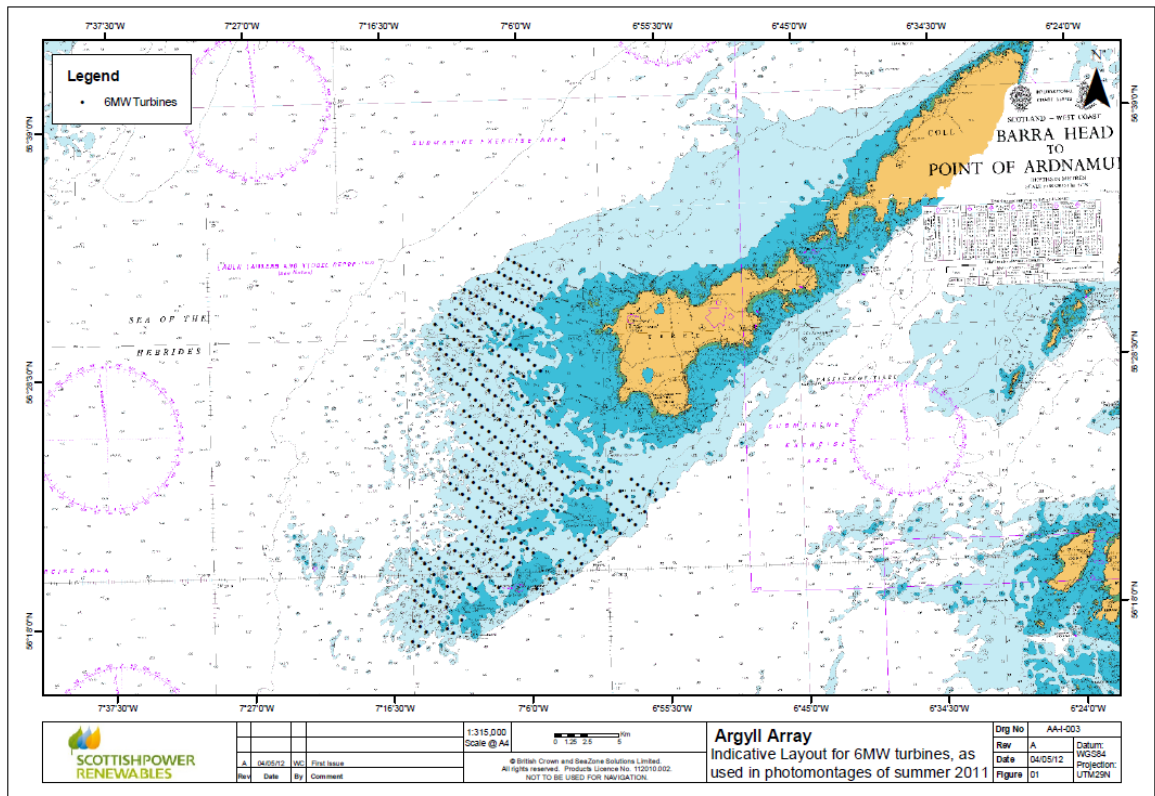
The proposed wind farm site for the Argyll Array originated from the Crown Estate's tendering round for offshore wind farm sites in the Scottish Territorial Waters in 2009. Scottish Power Renewables (SPR) was granted exclusivity rights from the Crown Estate to examine the feasibility of the Argyll Array site southwest of the Isle of Tiree. The project proposal was officially announced by the Crown Estate on 12<sup>th</sup>



February 2009. Since then SPR has been conducting several studies and assessments to explore the feasibility of this site.

This announcement in February 2009 has encountered protest and interest by the residents of the adjacent island of Tiree, as they had been unaware about the proposal until the day it was announced. Tiree is a small island of the Inner Hebrides (~78km<sup>2</sup>) at the margins of the Atlantic Ocean and has a population of 730. There are also a high proportion of retired residents (27%) and holiday / second homes (30% of all houses) (EKOS Ltd. 2012). Due to its fertile soil the island provides best conditions for agriculture. Besides agriculture, Tiree's economy is grounded on fishing and public services, as well as increasingly on tourism. Tiree's remote location makes it the most western island of the Inner Hebrides which can only be accessed by plane and ferry. Renewables are not new to the island since the community successfully established and built a single community wind turbine (called Tilley) in 2009, which has been generating a substantial amount of revenues for the community by selling electricity to the national grid.

Given this context, the islanders have divided opinions about the proposed Argyll Array wind farm due to its scale and close proximity to the island. The initially proposed site covers an area of 360km<sup>2</sup>, which exceeds the area of the island by far, and begins around 5km off the island's shore (see map). However, the array, location and number of wind turbines within the proposed site are still uncertain, depending on the size of the turbines and the outcomes of environmental assessments and socio-economic constraints. But the site has a potential to generate 1.800MW, which could include up to 300 turbines.



**Figure 3: Initial potential layout of Argyll Array (taken from SPR 2012a)**

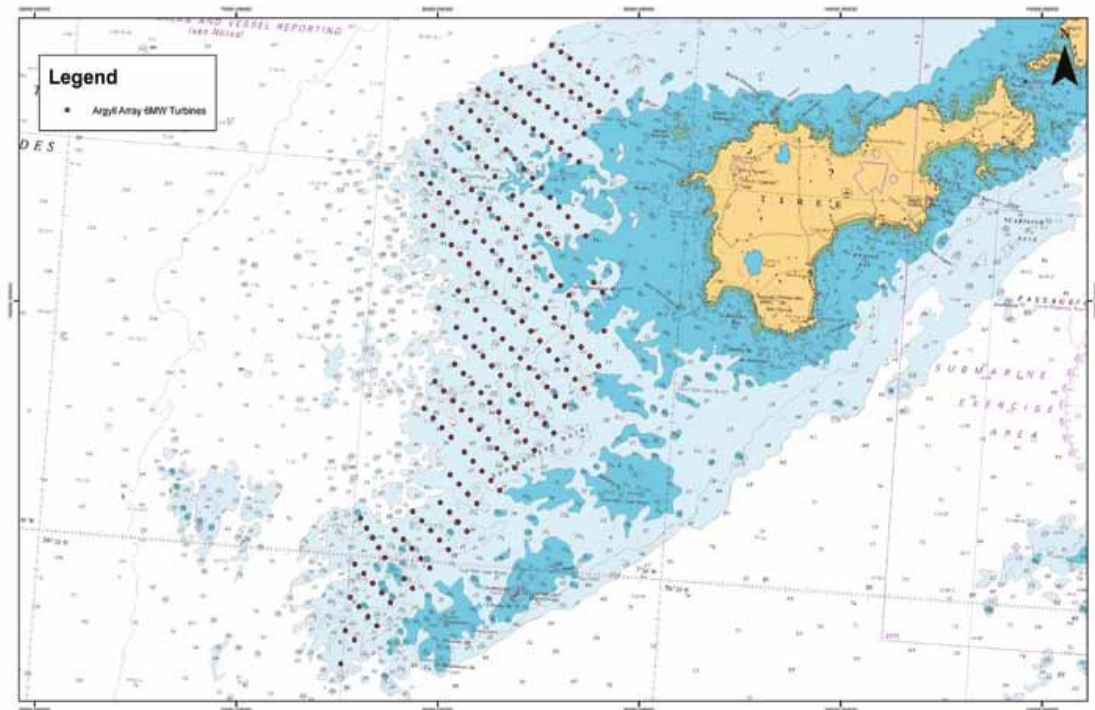
The planning process began with the scoping of the site by SPR to provide the baseline for further environmental impact assessments and to identify the key issues linked to the project. A scoping opinion was published by Marine Scotland in March 2011. Parallel to the scoping work by SPR, Marine Scotland worked on a Draft Plan for Offshore Wind Energy in Scottish Territorial Waters (2010), including a public consultation process, and also compiled a Marine Sectoral Plan for Offshore Wind Energy in Scottish Territorial Waters (2011), both of which included the Argyll Array site. Those strategic assessments considered all proposed offshore wind farm projects together. On a more individual level, the affected communities in Argyll & Bute (Islay, Kintyre and Tiree) initiated a socio-economic assessment for all three sites, as they believed that onshore impacts are only taken into account inadequately within the given strategic environmental assessments. The Scottish Government also called for more engagement with the community on Tiree and for more involvement of key stakeholders in the planning process at the individual project stage and therefore proposed a scenario and master planning approach (MARINE SCOTLAND 2011:7). Such an approach was also urged by the community. In early 2011, SPR even engaged a Tiree Community Liaison officer living on Tiree, in order to deal

with the community's concerns more closely and regularly. An onshore scenario mapping (Master Plan) including the developer SPR, Argyll & Bute Council, Marine Scotland and the Tiree Community was eventually initiated in 2011 in order to discuss the preferences, socio-economic impacts and costs of different operation and maintenance (O&M) strategies for the wind farm. This process included a number of consultation meetings on Tiree. A final report was published in November 2012.

In April 2012, SPR announced a delay of the Argyll Array planning application and postponed the submission of the Environmental Statement to the second half of 2014, which was justified with additional environmental assessments with regard to environmental issues that have been encountered. This date would be relatively close to agreed commitments for developing the wind farm site that were arranged in the lease from the Crown Estate.<sup>27</sup> Moreover, at the end of October 2012, SPR announced the consideration of a revision of the scale and the design of the Argyll Array, by reducing the area of the wind farm which may impact upon habitats of Basking Sharks (*Cetorhinus maximus*) and Great Northern Divers (*Gavia immer*). This would include the area around the Skerryvore Reef and would substantially downsize the wind farm (see map).

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<sup>27</sup> However, the delay has given rise to speculations by opponents about the true tactics of SPR with regard to the Scottish referendum in 2014 and the possible sale of the consented project to another developer.



**Figure 4: Potential revised turbine layout of Argyll Array (taken from SPR 2012b)**

#### **4.4.2 Stakeholder Network – Interests, Argumentations and Actions**

The pivotal stakeholder network includes administrative bodies and the wider public, which are involved in the planning process. Key stakeholders from the public consist of representatives from the Tiree community. At the beginning, the Tiree community, represented by the Tiree Community Development Trust (TCDT), has been informed about the development, but at later stages the local community was consulted and actively participated in the master planning process. However, local opponents also informed the planning process by lobbying against the wind farm and contributed to it by means of representations. The Argyll Array project must also be viewed in the light of national organisations that indirectly co-shape the conflicts over offshore wind farms. The following sections are concerned with the description of the key stakeholders, their interests and action strategies towards the Argyll Array and the storylines they employ to enforce their interests and thus constitute different conflicts.

**Table 4: Contextual summary of key stakeholders, Argyll Array**

	<b>Tiree Community Development Trust</b>	<b>No Tiree Array</b>	<b>Marine Scotland</b>	<b>Scottish Natural Heritage</b>	<b>Communities Against Turbines Scotland</b>	<b>Argyll Renewables Consortium</b>
<b>Interests</b>	<ul style="list-style-type: none"> <li>- prosperous community</li> <li>- creating socio-economic benefits from wind farm</li> <li>- minimising impacts</li> </ul>	<ul style="list-style-type: none"> <li>- preserve Tiree</li> <li>- averting Argyll Array</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting renewables</li> <li>- Implementation of planning process to find consensus</li> </ul>	<ul style="list-style-type: none"> <li>- preservation of nature and national heritage</li> <li>- Identification of conflicts</li> <li>- advice &amp; guidance</li> <li>- addressing climate change</li> </ul>	<ul style="list-style-type: none"> <li>- Preventing Scotland's landscape and seascape from wind farms</li> </ul>	<ul style="list-style-type: none"> <li>- siting of renewables in communities in a sustainable manner</li> </ul>
<b>Conflicts with wind farm, Argyll Array</b>	<ul style="list-style-type: none"> <li>- unclear O&amp;M effects will change the island</li> <li>- pervasive onshore impacts</li> </ul>	<ul style="list-style-type: none"> <li>- vast detrimental effects on Tiree</li> <li>- clash with economic and tourist interests</li> <li>- uncertain environmental impacts</li> <li>- visual burdens</li> </ul>	<ul style="list-style-type: none"> <li>- unclear onshore impacts</li> </ul>	<ul style="list-style-type: none"> <li>- overlap with habitats</li> <li>- basking sharks, geese, great northern divers</li> </ul>	<ul style="list-style-type: none"> <li>- no direct relationship</li> </ul>	<ul style="list-style-type: none"> <li>- no direct relationship</li> </ul>
<b>Storylines</b>	<ul style="list-style-type: none"> <li>- onshore impacts must be negotiated</li> <li>- benefits are possible and have to be pursued</li> <li>- Tiree underlies permanent changes</li> <li>- Consideration of local knowledge is inevitable for all stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>- detrimental onshore changes</li> <li>- site is too close to shore</li> <li>- wind farms are inefficient in addressing climate change</li> <li>- environmental impacts</li> <li>- distrust re Crown Estate &amp; SPR</li> <li>- wind farm is not justified</li> </ul>	<ul style="list-style-type: none"> <li>- renewables are needed and inevitable</li> <li>- wind farms and tourism can be balanced</li> <li>- mitigating of conflicts and local engagement is required</li> </ul>	<ul style="list-style-type: none"> <li>- renewables can be reconciled with local nature</li> <li>- location matters</li> <li>- more extensive assessments required</li> </ul>	<ul style="list-style-type: none"> <li>- too many onshore wind farms</li> <li>- wind energy is inefficient</li> <li>- visual impacts and noise pollution of wind farms</li> <li>- renewables agenda is not justified</li> <li>- uncertainty about climate change</li> </ul>	<ul style="list-style-type: none"> <li>- communities can benefit from renewables</li> <li>- local impacts must be mitigated</li> <li>- local expertise is inevitable</li> </ul>
<b>Action strategies</b>	<ul style="list-style-type: none"> <li>- active engagement with developer and planning authorities</li> </ul>	<ul style="list-style-type: none"> <li>- forming action group</li> <li>- writing protest statements</li> <li>- making use of consultation</li> <li>- national lobbying against wind farm</li> </ul>	<ul style="list-style-type: none"> <li>- providing the policy and planning framework</li> <li>- public consultation</li> <li>- enforcing engagement with communities</li> <li>- enforcing the directives</li> </ul>	<ul style="list-style-type: none"> <li>- providing advice and guidance on national and local levels</li> </ul>	<ul style="list-style-type: none"> <li>- lobbying on national level</li> <li>- supporting local action groups</li> </ul>	<ul style="list-style-type: none"> <li>- Lobbying</li> <li>- Engagement with authorities and developers</li> <li>- commissioning assessments</li> </ul>
<b>Knowledge construction</b>	<ul style="list-style-type: none"> <li>- comparisons to other wind farm sites</li> <li>- historical knowledge about island</li> <li>- own assessments</li> </ul>	<ul style="list-style-type: none"> <li>- assessments, reports</li> <li>- news, media</li> </ul>	<ul style="list-style-type: none"> <li>- own surveys,</li> <li>- consultation process to gain local knowledge</li> <li>- assessments</li> </ul>	<ul style="list-style-type: none"> <li>- own assessments, recommendations</li> <li>- own expertise</li> </ul>	<ul style="list-style-type: none"> <li>- media, reports, news, own experiences, academic literature</li> </ul>	<ul style="list-style-type: none"> <li>- assessments, reports</li> <li>- own expertise</li> </ul>
<b>Attitudes towards Argyll Array</b>	<ul style="list-style-type: none"> <li>- neutral, ambivalent</li> </ul>	<ul style="list-style-type: none"> <li>- strict opposition against site</li> <li>- moving it further offshore</li> </ul>	<ul style="list-style-type: none"> <li>- neutral, impacts and best options need to be identified</li> </ul>	<ul style="list-style-type: none"> <li>- neutral</li> <li>- impacts need to be identified and avoided</li> </ul>	<ul style="list-style-type: none"> <li>- no direct relationship</li> </ul>	<ul style="list-style-type: none"> <li>- supporting the interests of Tiree community</li> </ul>
<b>Spatial constructions</b>	<ul style="list-style-type: none"> <li>- spatial restructuring inevitable</li> <li>- proximity makes turbines dominating landscape feature</li> <li>- physical-material change of landscape can be managed</li> </ul>	<ul style="list-style-type: none"> <li>- Tiree is a unique, remote and agrarian island with tourist qualities</li> <li>- distance matters</li> </ul>	<ul style="list-style-type: none"> <li>- Scotland provides excellent physical conditions for wind energy</li> </ul>	<ul style="list-style-type: none"> <li>- Scottish seascape is unique and an asset</li> </ul>	<ul style="list-style-type: none"> <li>- Landscape is a huge economic asset for tourism</li> </ul>	<ul style="list-style-type: none"> <li>- excellent physical conditions to host renewables at west coast</li> </ul>

### ***Marine Scotland / Scottish Government***

Marine Scotland is a central directorate of the Scottish Government that was established on 1<sup>st</sup> April 2009 and is responsible for the management of Scotland's waters. As the marine department of the government it is in charge of marine planning, policy-making, science, monitoring and conservation. Also the licensing of marine renewables falls under this scope. Given the Government's increased reinforcement of the establishment of offshore wind farms, Marine Scotland was responsible for implementing the policy framework for the planning of offshore wind farms.

Marine Scotland's view is framed by the understanding that offshore wind farms may well have impacts onshore which not only comprise physical and infrastructural developments but also socio-economic effects for the community. They do not deny the affectedness of local communities and take up a rather intermediary position in the hierarchy between the communities, the developer and ministers, and try to negotiate between all stakeholders. Consultation meetings and feedback workshops were held in Tiree, Campbelltown, Dumfries, Wigtown, Islay and Maryport at the beginning of 2011, with the purpose to ensure that the consultation report correctly identified all issues raised by the respondents (MARINE SCOTLAND 2011a). Consultation and engagement with communities is seen as a core task of Marine Scotland and it pursues a mutual dialogue with coastal communities and takes the view that coastal communities in the vicinity of offshore wind farms may be affected.

After the common consideration of all short-term options for offshore wind farms and the decision to remove the development plans in the Solway Firth, Marine Scotland engaged more closely with the community on Tiree. This continued engagement and collaboration included further public meetings in 2011 and 2012 which served to keep the community updated about the progress of the Argyll Array on regular basis and to consult their views on the progress and further steps. In particular, the collaboration culminated in a joint steering group to conduct the onshore scenario mapping for the Argyll Array.

### ***Tiree Community Development Trust (TCDT)***

The Tiree Community Development Trust (TCDT) is a membership organisation that was formed in March 2006 and is managed and owned by the community of Tiree. It justifies its existence with the promotion of the sustainable, economic, environmental and social development of Tiree. In doing so, the TCDT has unintentionally taken over the duties of the community council and advocates a community led approach to rural development. To continue local economic work the Trust was founded and entrusted with the development of the Tiree community. The Trust consists of a Board of Directors of seven members that are annually elected by the Trust members, who must be residents of Tiree. Four permanent positions of the Trust are funded by the Highlands and Island Enterprise (HIE) and through LEADER. The organisation of the Trust is arranged in different subgroups which are dedicated to various day-to-day businesses and deal with different issues the island is concerned with. So the Trust represents a bottom-up approach of local policy-making that is directed to the actual needs and desires of the community. It initiated further development projects with the fundamental goal of working against a steady decline of the population, which endangers basic public services on the island, such as the school, surgery and the old people's home.

There is a community wind turbine (Tilley) on Tiree, which was initiated by the TCDT and owned by Tiree Renewable Energy Ltd. (TREL) which is a subsidiary of the Trust and was opened in April 2007. It is expected that the single wind turbine will generate revenues of £100.000 per year for the community, which are managed in 'Windfall Fund' (Tiree Trust 2012). Despite the success of the community turbine, the TCDT remains in an ambivalent position towards the Argyll Array wind farm project planned at their doorstep.

The TCDT itself tries to keep a neutral stance towards the Argyll Array without any prejudiced propaganda and attempts to gather and consider equally any potential benefits and disadvantages for the community of Tiree. They have been trying to productively contribute to the debate and discussions by seeking the contact with the developers as well as with the consenting authority.

“The Trust's view on the Array is that it is neither in favour to it nor opposed to it. The job of the Trust is to find out as much information as possible on the likely impacts and to present that to the community, and then the community can make up its own mind whether it wants to oppose it or approve it or just being neutral.” (*Interview TCDT, 2011*)

The Trust is fighting for best practices in the planning process, emphasising the crucial role of communities in the planning process and trying to achieve the best benefits for and least impacts on the community. That is why they also co-founded the Argyll Renewables Communities Consortium (ARC) together with communities on Islay and Kintyre, which faced similar wind farm developments off their coast (see section on ARC). In this context, the TCDT, together with ARC, has urged for the implementation of an individual Socio-Economic Impact Assessment (SIA) of likely impacts on the island, which are meant to be covered inadequately by the legally required Environmental Impact Assessment (EIA) executed by the developer. The expenditure for this assessment was refunded from the developer.

These desired as well as unintended entanglements with the developer, and the neutral stance of the TCDT, have variously been criticised and polarised by the No Tiree Array Action Group (NTA), as they assume that it is impossible to maintain a neutral position while looking into potentials and disadvantages, and regard the TCDT as being proactive towards the wind farm, just because they are not opposing it (see next section on NTA).

The TCDT organised and held many public meetings and workshops with the community through which the community got updated about the progress and likely impacts. In doing so, TCDT acknowledged the fact that different O&M strategies for the wind farm will have different effects on the island and its inhabitants. That is why they also pushed for the establishment of a master planning process, which should be more practical than a SIA (Interview TCDT, 2011). The master planning process basically worked towards a Tiree Onshore Scenario Mapping in which different O&M strategies and their respective impacts on the island were captured.

### ***No Tiree Array action group (NTA)***

Other than the TCDT, the No Tiree Array Action Group (NTA) is an action group which clearly opposes the Argyll Array. Their fundamental claim is '*No Tiree Array within 35km from the coast*' and their slogan is, '*we don't inherit the land from our ancestors, we borrow it from our children*'. The action group was founded in November 2010 on the initiative of a handful of residents, who also structured the organisation in its early days. Their motive to form an opposition group arose from what they perceived as the tendency of the TCDT to take a favourable stance in the debates about the proposed Argyll Array. They are "not anti the Array, but anti the



way the Array is proposed at the moment” (Interview NTA, 2011). This statement may relate to the location of the wind farm site as well as to the performance of the planning process. Like the Community Trust, the opposition group also claims to campaign for the benefits of the local community, but deems a clear oppositional demeanour more promising to achieve best outcomes than negotiating instead:

“When you’ve got to fight against something to get the best on the table, you have to fight for the decision made straight away and have the proposer come to you, taking your menu, rather than giving you a menu. This is the way you will always get the best benefits. [...] To remain neutral is to bury one’s head in the sand, yeah.” (*Interview NTA, 2011*)

The NTA claims to be actively supported by around 150 people from the island, second home owners, and many more supporters do not permanently reside on the island. This is in line with the assertions of the TCDT, saying that most of the protests come from incomers or second home owners, which implies that they have a different understanding and perception of what makes Tiree unique and how the wind farm would impinge on the qualities of the island (see section 5.1.1).

The NTA claims that TCDT does not fully represent the whole community and that is why the “NTA should be added to the list of consultees” (Marine Scotland 2011:9), as the group regards itself to be in a less powerful position than the TCDT. The non-representative mandate of the TCDT has also been panned by other opponents:

“While Scottish Power continues talks with the Tiree Development Trust, this body by no means represents the views of all islanders. The Scottish Government should ensure that a formal island referendum takes places before any decision is taken to allow the project to proceed.” (*Consultation response, public #66, 2010*)

By stressing the physical, visual social and cultural transformation of the island that the wind farm would induce, the NTA group’s fundamental principle is that disadvantages and detriments outweigh the uncertain and, if any, negligible benefits. Opponents gainsay any benefits the wind farm may bring for the islanders. They want to preserve the current conditions and lifestyle on the island, as it is the rusticity and remoteness that makes Tiree unique and appealing for people to visit or to live there. Thus, the elementary strategy of the NTA is to focus on the local context and on the accentuation of specific impacts on Tiree in order to create arguments against the construction of the wind farm and not to get involved in the broader debates over wind energy and the need of renewables, as indicated in the following quote. The

protest against wind energy *per se* seems worthless due to the dominant Scottish renewables agenda:

“We don’t want to get put into this huge wind farm debate, okay. The whole renewables debate. We want to stick specific to Tiree. [...] We don’t want to be drawn into the debate of an anti-renewables group. Those people are just possessed [laughs] by believing wind power is not working. We don’t want to go this path.” (Interview NTA, 2011)

As insinuated in the quote, the NTA still keeps its local perspective, but has also turned towards a more general anti-wind energy rhetoric during the past two years, which is evidenced by their support of other wind farm opposition groups, by the facts they have commented on their websites, and by the reproductions of articles from conservative newspapers. The action group tends to slip into anti-wind and anti-renewable debates. The change in stances is exemplified in the following figure, which accuses the Scottish Government of non-reflective actionist estimations and activities towards climate change.



**Figure 5: Illustration that points to the perceived unfairness of the Scottish Government's wind energy policies towards the host communities which feel pressurised (taken from NTA website)**

A common anti-renewables storyline pervades through the NTA’s consultation response to the Scottish Government's inquiry into the 2020 renewables targets, by making clear that “unless there is a binding international agreement with draconian sanctions what one nation achieves is an irrelevancy” (NTA consultation response 2012:1). In addition to the negation of the achievability of Scotland’s 2020 targets regarding the reduction of CO<sub>2</sub> emissions, they also challenge the usefulness and

relevance of the contributions of a small nation to a global issue. However, the recent activities and arguments of the No Tiree Array action group reflect a general anti-renewables rhetoric which they initially tried to avoid.

### ***Argyll Renewables Communities Consortium (ARC)***

The ARC (Argyll Renewables Communities) is a consortium formed by the community-owned Islay Energy Trust (IET), the Tiree Community Development Trust and Kintyre Energy Trust as a direct response to the three offshore wind farm developments in Argyll & Bute. The objective is to identify means through which the communities can actively participate in the planning and development of offshore wind and tidal energy projects to ensure best outcomes for the communities. This goal is framed by a belief that collaboration between communities, developers and licensing authorities leads to an optimisation of the planning process and to better outcomes for all stakeholders. The initiative to form a common strategy originated from the TCDT.

“We were founding members of ARC. [...] So we immediately contacted the community groups in those two communities. [...] We contacted them and said, look, we’ve got to get together, we’ve got to work together. We are three small communities, if we come together we can have a louder voice, more politicians will listen, power companies will listen to us, we must get together. That is how ARC was created.” (*Interview TCDT, 2011*)<sup>28</sup>

“Our view is very much about ... engagement. [...] We are a community organisation and we can’t say, yes we want to do it, we want to do it, we want to do it, without fully understanding both, the positive and negative sides, which is why we ended up commissioning this piece of work to SQW to look at the impacts. At the same time we spoke to Tiree and we spoke to Kintyre and they had the same issues. [...] So we said, okay let’s get together and do this”. (*Interview IET, 2011*)

So ARC forms a discourse coalition whose members share particular storylines and practices but not necessarily the same extent of interests towards the placing of renewables. A crucial step for ARC was taken when they successfully launched and commissioned a common socio-economic impact assessment scoping study for all three offshore sites. After incipient enthusiast activities that included the lobbying for and initiation of the common SIA scoping study and common consultation responses, the collaboration seems to have cooled down since the individual wind farm developments have progressed to the project stage and the Kintyre proposal has been dropped.

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<sup>28</sup> See Chapter Nine for details on this issue.

### ***Scottish Natural Heritage (SNH)***

Scottish Natural Heritage (SNH) is an expert governmental organisation that advises the Scottish Government on environmental issues and environment-related developments. Although being an environmental organisation, the SNH also considers landscape and seascape-related issues and provides information and recommendations on visual, cultural, heritage-related impacts of proposed infrastructural developments. As such, SNH is an important statutory consultee in the planning process for offshore wind farms in territorial waters and has accompanied and advised on the proposed Argyll Array wind farm. Given its duties as environmental experts of the Scottish Government, SNH has engaged with the developers of the wind farm, too. Direct dialogue with and advice given to the developer is meant to avoid additional costs for the developers and to assure a more straightforward manner of implementing assessments and constructing the turbines.

Being an environmental organisation, SNH endorses the advanced use of marine renewables as long as these are sensitively sited without causing severe damage to wildlife and the environment, and as long as natural heritage interests are sufficiently considered (SNH 2010). Conflicts induced by offshore wind farms are mostly seen in terms of impacts on marine wildlife as well as site-specific visual and landscape-related impacts (Interview SNH Perth, 2011).

With specific regard to the Argyll Array proposal early scoping advice remained rather general, since precise information about the size, characteristics and O&M measures of the project were unknown and left open by the developer. However, SNH notes that the extent of the proposed area allows for a wind farm of “substantial” scale within “challenging conditions” west of Tiree, so that it is expected that it will have some effects on natural heritage interests (SNH 2010:2). In particular, visual aspects, the significance of the seascape character, and the sense of place in Tiree have to be carefully assessed, as pivotal features of the wind farm are unknown (SNH, Argyll Array Scoping Advice, 2010:5).

Interestingly, SNH is aware of and addresses the same place-related features of remoteness and tranquillity of Tiree as the local opponents are concerned about, too. That is why SNH strongly recommends assessments that consider the relationship between the turbines and the sea backcloth, other coastal elements and focal points on Tiree. Other early hints of SNH relate to fish habitats for commercial fishing,

marine protected areas, sites of specific scientific interests and sites of protected species, which are currently under revision and which could overlap with the wind farm area.

While advising on environmental issues, SNH has to balance the environmental impact of a particular wind farm against its necessity of being a renewable energy source, which may constitute fundamental internal conflicts of reconciling natural heritage interests and promoting renewables at the same time. But, on the other hand, as a statutory consultee and advisor and because of its engagement with the developers, SNH is in the powerful position to crucially inform the planning process. This was also criticised by some stakeholders which blame SNH to be a biased governmental organisation.<sup>29</sup>

### ***Communities Against Turbines Scotland (CATS)***

CATS (Communities Against Turbines Scotland) is an umbrella organisation backing local action groups that fight against the building of further wind farms all over Scotland. They regard themselves as the voice behind wind farm opposition groups and their focus is on onshore wind farms and the perceived devastation for the Scottish landscape. One of the founding members of the NTA was invited to become a committee member and was nominated as the offshore expert of CATS, after having given a speech at a meeting. So the direction of CATS also turned towards the opposition of offshore wind farms.

The fundamental aim of CATS is to fight against the Scottish renewable energy policies that predominantly expedite the expansion of wind energy to meet renewable targets, which are seen as not achievable without ruining Scotland's landscape and economy. Their activities have diverged from the local context and exclusively concentrate on challenging the Scottish renewables strategies. Their fundamental argument combines two different storylines, saying that wind turbines damage the local environment and national economy. In doing so, their narratives move also towards a general anti-SNP agitation and even towards the questioning of climate change and the denial of global warming.

“There is increasing evidence that global warming is not actually happening. [...] It seems likely that Governments have been duped by the wind and global warming industries.”  
(*J.M.Gibson, Consultation Response to Climate Change Scotland Bill, 2009*)

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<sup>29</sup> See 8.3.1 and 9.3 on further implications of these issues.

The national protest movement against wind turbines has been fuelled by Donald Trump entering the stage. Donald Trump approached CATS in 2012 and asked for help to fight against an offshore wind farm proposal by which he feels personally affected as it is located off the coast where he has built a golf resort. Trump fears the visual destruction of the landscape and seascape and the absence of visitors which would contradict his ambitions and investments. The collaboration of CATS and Trump culminated in a common appearance at the Scottish Parliament's Renewables Inquiry on 25<sup>th</sup> April 2012<sup>30</sup>. However, while having gained a lot of media attention and consideration of their concerns through the Scottish Parliament, their direct activities regarding the Argyll Array remained negligible.

### ***The Crown Estate***

Against the backdrop of the planning process for offshore wind farms in Scotland, the role of the Crown Estate which manages and leases the seabed is very controversial to most of the stakeholders. There are two key issues reflected in the storylines of stakeholders involved in the siting of offshore wind farms in general and the Argyll Array in particular. The first storyline relates to the influence and power of the Crown Estate over Scottish territorial waters and has some nationalist and devolution-related implications. This relates to ideas about whether the Crown Estate should be in control of the Scottish seabed (Interview TCDT, 2011).

The other issue is that all three offshore wind farms sites in Argyll had been leased to the respective developers before official announcements were released and before affected communities were approached. This is seen as very illegitimate and disadvantageous for the communities that have to cope with the wind farms. But the effort of the Crown Estate to impel the master planning process for Argyll Array has been appreciated again, although their positionality remains unclear. Planning issues related to the Crown Estate will be revisited in Chapter Nine.

### **4.4.3 Practices of resistance – action strategies of opponents**

The action group heavily relies on the internet and social networks to organise its protest and to disseminate its views and propaganda, and to keep their supporters on

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<sup>30</sup> The involvement of Donald Trump in Scottish politics is not only seen critically by the Scottish Government, but CATS are also sceptical about his support, which could shed negative light on and co-opt their campaign, although they initially benefited from the attention regarding the possibility to be heard at the Scottish Parliament (CATS, 2012).

the mainland updated. At the beginning, such practices of resistance were very successful in reaching a large number of people but were less appropriate to inform the majority of the islanders. So the strategy had to be adjusted, as stated in the following quote:

“We used modern technology to start off with, but now we are going back to snail mail and sending pigeons, just to try to get the message out. There is an old tradition on the west coast of Scotland, where people like to sit down and talk, it is a Gaelic thing. What we often find ourselves as activists on the island is, we are taking a bottle of whisky and go and sit in and talk to the old folks. This is just tradition of doing things out here. We have been using IT, internet, we use a little bit on Twitter, a little bit on Facebook, we have our webpage. And now we are going back to traditional methods and bringing the message to folk.” (Interview NTA, 2011)

The oppositional attitude of the group is also mirrored in the rhetoric allusions in their slogan and employed jargon as well as in the claim to move the wind farm much farther offshore which all emphasise the felt affectedness of the inhabitants of Tiree and the transformative implications the wind farm would have on them and on the island. Similarly, the exclusive use of *Tiree Array* instead of the name *Argyll Array* is supposed to hint at the proximity of the wind farm to the island of Tiree and the people who will have to live with the development off their shore (Interview NTA, 2011). The name Argyll Array is meant to have been chosen, “because nobody wants to acknowledge that it is near people” (Interview NTA, 2010). That is why the NTA makes often use of the term ‘inshore’ instead of ‘offshore’ to point to the immediate vicinity of coastal communities. This would imply that the developers are aware that offshore wind farms close to the shore would have impacts on people, too. Another linguistic tactic of the group is to emphasise the name of Iberdrola, the Spanish electric utility company of which Scottish Power is a subsidiary, in order to polemically point out that a foreign company is about to damage the Scottish landscape and the life on the island<sup>31</sup> (see figure 6).

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<sup>31</sup> The same strategic argument has been applied by ‘Keep Wigtown Bay Natural Action Group (KWBN)’ to show the improper activities of the DONG Energy company which proposed a wind farm in the Wigtown Bay, as close to the shore, as it would violate Danish regulations. “...bearing in mind, the site had been proposed by DONG Energy, a Danish company, and they were actually going against their own guidelines within Denmark. And that actually became the main thrust of our argument, that DONG energy, 70% state-owned in Denmark, were proposing something in Scottish territorial waters that wouldn’t have been permitted in Danish waters” (Interview KWBN, 2011).



**Figure 6: No Tiree Array banner on Tiree next to the ferry harbour (own photograph, taken in 2011)**

Even though increasingly drawing on anti-renewables arguments, the NTA did not lose its focus on the local context while fighting against the Argyll Array. This was confirmed by one of the NTA founders when making tactical suggestions to another local wind farm action group on their website, which also gives evidence of initial networking activities with other opposition groups:

“We at NTA have tried our very best to keep things as local as possible, to focus on our belief that the Tiree Array is not good for Tiree...however, the nature of our planned windfarm is vast...40% of Scotland’s proposed offshore wind...it is of strategic concern to the government and fiscal concern to the developer...our campaign has had too, in some circumstances, look at the greater whole.” (*NTA member on People Against Clachan Turbines website, 15.03.2012*)

In contrast to the NTA, the TCDT rather acts on Tiree by organising consultation events in order to keep the community informed. By pursuing such events, they also try to bridge the gap between the developers and authorities. In order to act more powerful they joined ARC, which provided them with better chances to call attention to their concerns, but also to actively and successfully intervene in the planning process by initiating a socio-environmental impact assessment and essentially expediting their participation in the steering group.

Besides propagandising on site, all stakeholders and opponents directly associated with the Argyll Array project adhered to the legally prescribed framework to protest and made use of the provided channels to get their messages across, such as consultation responses and representations. The NTA and citizens from Tiree responded to the public consultation and submitted mostly extensive and detailed representations in which they expose their concerns and local knowledge. Besides the responses to general consultations on the renewables agenda and the draft plan of



offshore wind energy initiated by the Scottish Government, the NTA also requested clarifications on specific issues from Marine Scotland and submitted uninvited critiques of SPR's poor public information and consultation strategy.

## **4.5 Case Study 2: Baltic 1 Offshore Wind Farm**

After having described the Argyll Array case study, the following sections are concerned with the presentation of the stakeholders of the German case study. Therefore, the Baltic 1 offshore wind farm, which is the first commercial wind farm in German territorial waters, serves as a second case study for the particularisation of involved actors, their concerns and action strategies. In doing so, the key stakeholders who are affected by the construction of the wind farm and who are involved in the planning process as well as their interests and action strategies will be revealed. Before that, the historical context of the development of Baltic 1 wind farm will be described first.

### **4.5.1 Historical Context –The building of Mecklenburg-Vorpommern's first offshore wind farm**

The intention to build a pilot offshore wind farm in the territorial waters off Mecklenburg-Vorpommern arose in 1997 when a consortium of three companies planned a wind farm of 12-15 turbines north of Börgerende. After a first application conference along with public agencies, it was suggested to move the proposed site due to substantial concerns by the Waterways and Shipping Directorate and the Military District Administration Office. Subsequently, alternative sites were discussed in 1999 and 2000. A modified application was submitted to the planning authority on 11 Oct. 2000 which proposed a wind farm site situated north of the Darß peninsula and west of the island of Rügen. The application conference (scoping meeting) was held in early 2001, in which the scoping for this site was determined. The specified scope of investigations and assessments was oriented towards the guidelines of the BSH for licensing wind farms in the EEZ and the practices exceeded regular requirements (MABL-MV 2005b:15). In 2003 the developer changed and the Offshore Ostsee Wind AG now made an application to expand the wind farm to 21 turbines. As the Offshore Ostsee Wind AG also intended to build the wind farm Kriegers Flak within the EEZ, the cable route which connects both wind farms had to be included in the regional planning procedure, too. The application was modified again in 2003 as the developer wanted to include two 5MW turbines out of the proposed 21 turbines. The regional planning procedure was finally initiated on 6<sup>th</sup> August 2004, once all necessary documentations had been submitted (MABL-MV 2005a). In contrast to the onshore area, offshore wind farms within the prioritised

areas<sup>32</sup> in coastal waters require the implementation of a regional planning procedure that precedes the licensing process. This is because of still missing scientific knowledge and findings about offshore wind farms (MABL-MV 2005b).

During the regional planning procedure all relevant communities were asked to display all documentations and to inform the public about the project, who could comment on it until 4<sup>th</sup> Oct 2004. A hearing was held in the community of Zingst on 8<sup>th</sup> Dec 2004 “with the objective to initiate a dialogue about the raised arguments between affected people, the developer and public agencies and to propound additional issues” (MABL-MV 2000a:15). The issues discussed focussed on shipping safety, environmental interests, scenery, visibility and tourism.

The basic outcome of the regional planning procedure is a regional planning evaluation in which a further development of a project is either recommended or rejected. Besides this process, a designation of suitable areas for offshore wind farms within the 12nm-zone was created by the ministry at the same time. The whole planning process was retrospectively regarded as a “mutual learning process between the developer and the ministry” (Interview, Planning Agency, 2011), as both had been inexperienced in developing offshore wind farms. Existing difficulties are mirrored by the length of the process that exceeded the prescribed 6 months. However, the key reason to give permission to the project to progress to the licensing process, was given by its “pilot character”, related to a small wind farm and the opportunity for local investors and companies to gather experience in the offshore industry. Another factor is supposed to be the joint grid connection with the larger Kriegers Flak wind farm (now Baltic 2) in the Exclusive Economic Zone. However, critical comments on environmental impacts and the security of shipping caused restrictions and requirements that the wind farm had to meet in terms of size, height and array of turbines, so that the wind farm cannot be expanded at later development stages anymore. All affected stakeholders who participated in the regional planning procedure were given access to the regional planning evaluation.

Through the positive evaluation of the regional planning procedure the wind farm could go ahead to the licensing process which was conducted by the Agency of Environment and Nature as the Lower Environmental Agency. But the 21 wind turbines and the grid connection (cable route) were considered separately in two

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<sup>32</sup> Priority areas on the territorial waters are designated by the respective federal countries.

different procedures. During the licensing procedure all public agencies, communities and individuals were given the opportunity again to comment on the project and its previous assessments and evaluations. But new assessments were conducted, too. This process of public participation also included a public hearing which had to be extended to three days because of the number of people who objected to the wind farm and the number of issues discussed. So local resistance was largely articulated through the means provided by the planning and licensing process and was initiated by the communities Prerow and Zingst that face the wind farm site. This also included planned lawsuits against the wind farm project. Controversies about Baltic 1 were also fought at the party political level. Both issues will be picked up later again.

However, the construction of Baltic 1 was officially authorised, according to the Federal Control of Pollution Act, by the Ministry of Environment of Mecklenburg-Vorpommern on 5<sup>th</sup> April 2006. The grid connection was licensed in a second partial permission on 18<sup>th</sup> August 2006. But in 2008 both wind farms, the approved Baltic 1 and Kriegers Flak (approved in 2005), were taken over by the energy company EnBW (Energie Baden-Württemberg) which is one of the few national energy giants based in southern Germany. EnBW implemented the construction of Baltic 1 in 2010, before it commenced operation on 2<sup>nd</sup> May 2011.

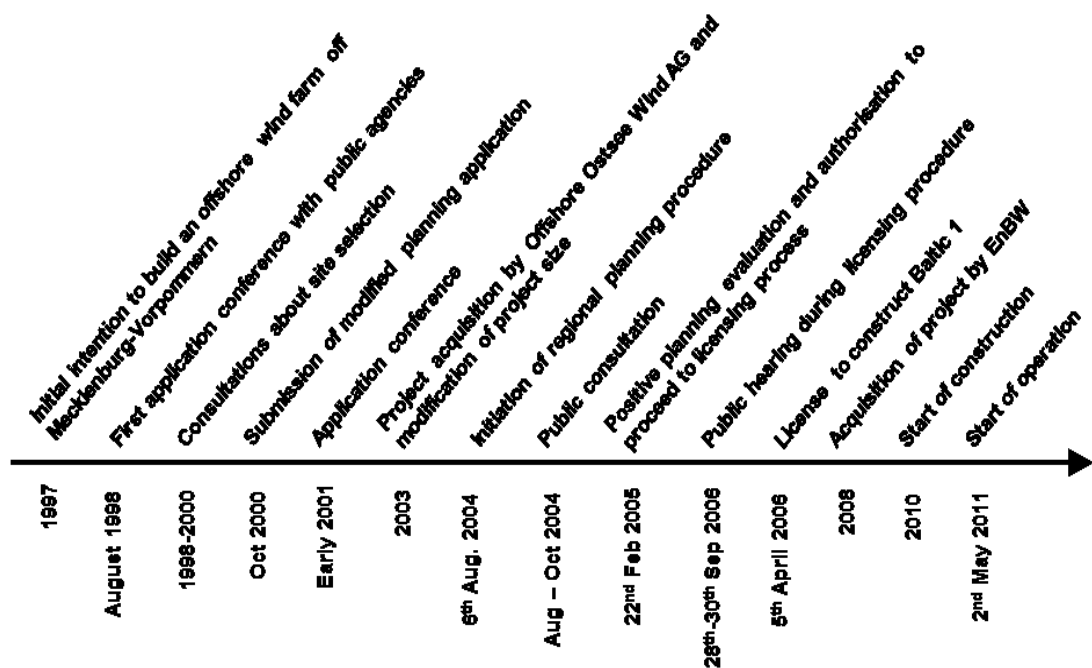
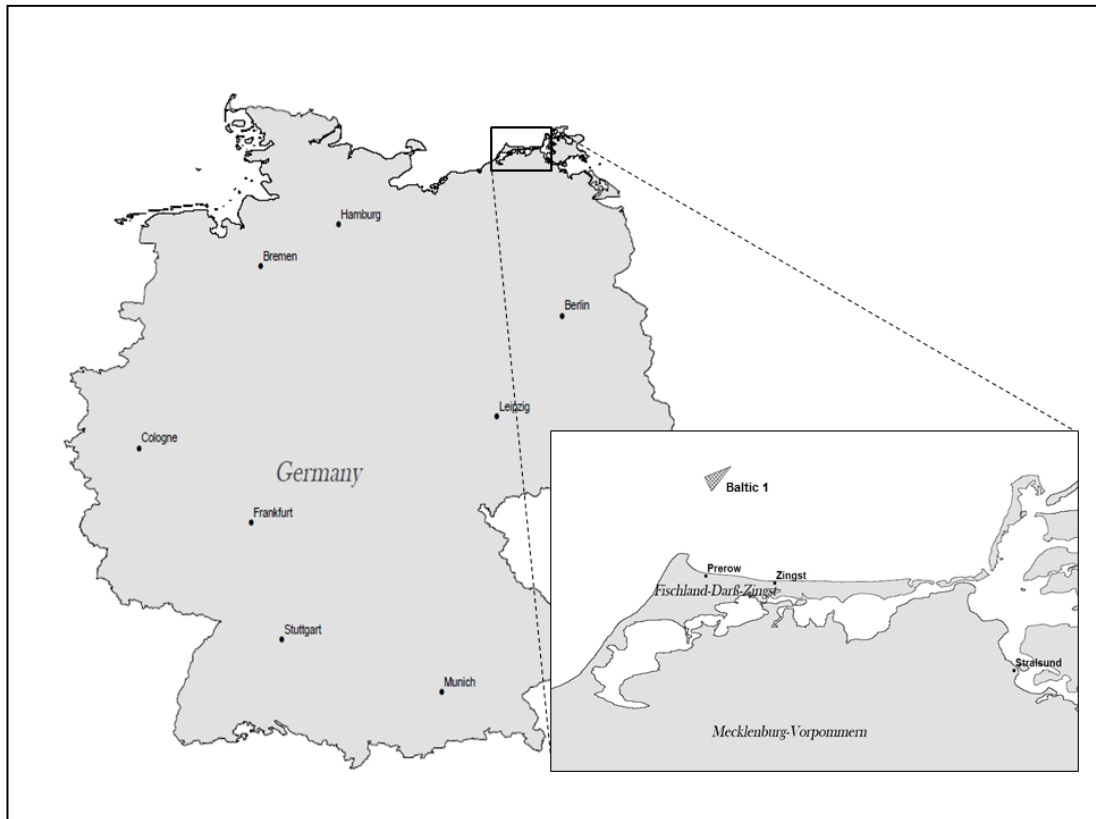


Figure 7: Timeline of planning events, Baltic 1



**Figure 8: Location of Baltic 1 offshore wind farm**

#### **4.5.2 Stakeholder Network – Interests, Argumentations and Actions**

The stakeholder network includes all major organisations, administrative bodies and public actors who were involved and participated in the planning and licensing processes for Baltic 1. The scope of involvement of stakeholders was dichotomous. All stakeholders who are supposed to be somehow affected by the wind farm project and who could usefully contribute to the planning were asked by the planning and licensing authorities to respond to and give advice on the plan. This is part of the procedure prescribed by the Federal Control of Pollution Act regulating the licensing process. But those stakeholders who were invited to comment on the plan only included administrative and governmental bodies and non-governmental organisations. Private stakeholders and the wider public (civil society, residents, communities) were only informed of the plan instead of having been given the chance to formally take part in the planning process as invited experts. However, the licensing procedure provides the wider public with the opportunity to submit written

representations and statements within a certain time frame and to participate in a hearing.

The following sections serve to describe the space-related interests, goals, valuations and action strategies of key stakeholders. Each of the actor groups or stakeholders refer to a certain type of knowledge and have a certain orientation to the world or, in other words, relates the world to itself (WERLEN 1997). This orientation frames the perception, explanation and interpretation of reality regarding the wind farm project and constitutes conflicts. Conflict lines about Baltic 1 will be elaborated in section 5.2.

**Table 5: Contextual summary of key stakeholders, Baltic 1**

	<b>Planning Authority</b>	<b>Licensing Authority</b>	<b>Districts</b>	<b>Tourism Association</b>
<b>Interests</b>	<ul style="list-style-type: none"> <li>- promoting renewables</li> <li>- Implementation of planning process to find consensus</li> <li>- mitigation of conflicts</li> <li>- evaluation of project</li> </ul>	<ul style="list-style-type: none"> <li>- implementing licensing process acc. to BlmSchG</li> <li>- nature conservation</li> </ul>	<ul style="list-style-type: none"> <li>- use of renewables without wind energy</li> <li>- prosperous tourism industry</li> <li>- sound and unspoilt environment as a foundation of livelihood and quality of life</li> </ul>	<ul style="list-style-type: none"> <li>- maintain successful tourism industry</li> <li>- unimpaired environmental conditions</li> </ul>
<b>Conflicts with Baltic 1</b>	<ul style="list-style-type: none"> <li>- impacts on migratory birds</li> <li>- risks with</li> </ul>	<ul style="list-style-type: none"> <li>- military uses</li> <li>- impacts on birds and adjacent nature preserves</li> </ul>	<ul style="list-style-type: none"> <li>- conflicts of interest and values</li> <li>- significant overlaps with tourism interests</li> <li>- loss of fishing areas</li> <li>- increase of ship collisions and the risks of environmental damages</li> <li>- collides with environmental efforts</li> </ul>	<ul style="list-style-type: none"> <li>- ship collisions and environmental damages</li> <li>- impacts on birds and adjacent nature preserves</li> <li>- negative impacts on tourism</li> </ul>
<b>Storylines</b>	<ul style="list-style-type: none"> <li>- renewables are needed and inevitable</li> <li>- Baltic 1 is a chance for local economy and creates jobs</li> <li>- no severe impacts and risks expected</li> <li>- mitigating of conflicts is crucial prerequisite of positive planning evaluation</li> <li>- communities argue emotionally</li> </ul>	<ul style="list-style-type: none"> <li>- public concerns are mostly emotional and arbitrary</li> <li>- expert knowledge is crucial to licensing</li> <li>- conflicts can be mitigated through thorough planning</li> <li>- media influences the public opinion</li> </ul>	<ul style="list-style-type: none"> <li>- visual impacts impairs tourism and results in economic losses</li> <li>- pilot project is not legitimate</li> <li>- increased risks of ship collisions and environmental damages</li> <li>- uncertainty about consequences due to lack of experience, positive effects are uncertain</li> </ul>	<ul style="list-style-type: none"> <li>- wind farm increases risk of ship collisions</li> <li>- pilot project is not justified</li> <li>- assessments are inappropriate</li> <li>- wind farm is too close to the shore</li> <li>- wind farm was political will</li> </ul>
<b>Action strategies</b>	<ul style="list-style-type: none"> <li>- providing the policy and planning framework</li> <li>- public consultation</li> <li>- engagement with affected authorities</li> <li>- enforcing the directives</li> </ul>	<ul style="list-style-type: none"> <li>- steps according to BlmSchG; understanding- oriented activities</li> <li>- initiating of consultation; consultation of expert knowledge</li> <li>- legitimising wind farm by imposing requirements</li> <li>- negotiation with stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>- according to the legal framework, statutory consultee</li> <li>- written representations, hearings, better arguments</li> <li>- questioning of planning practice</li> </ul>	<ul style="list-style-type: none"> <li>- consultation response to draft plan</li> <li>- collaboration with protest group</li> <li>- delegitimising the wind farm</li> <li>- mobilising residents and business owners</li> </ul>
<b>Knowledge construction</b>	<ul style="list-style-type: none"> <li>- consultation of experts</li> <li>- expert assessments</li> <li>- prior knowledge from other infrastructure projects</li> </ul>	<ul style="list-style-type: none"> <li>- own assessments</li> <li>- knowledge from expert reports</li> <li>- prior knowledge from onshore developments</li> <li>- prior knowledge from planning evaluation</li> </ul>	<ul style="list-style-type: none"> <li>- Claims are underpinned by surveys and statistics</li> <li>- Knowledge about previous ship accidents</li> <li>- reference to local expert knowledge</li> </ul>	<ul style="list-style-type: none"> <li>- own surveys and experiences</li> </ul>
<b>Attitudes towards Baltic 1</b>	<ul style="list-style-type: none"> <li>- neutral</li> <li>- considered in the context of conflicting uses and priorities</li> </ul>	<ul style="list-style-type: none"> <li>- wind farm is planning object and has to be considered with regard to other uses</li> </ul>	<ul style="list-style-type: none"> <li>- complete rejection of wind farm</li> </ul>	<ul style="list-style-type: none"> <li>- wind farm is not acceptable at this site</li> </ul>
<b>Spatial constructions</b>	<ul style="list-style-type: none"> <li>- environmental conditions on Darß are an asset of the region</li> </ul>	<ul style="list-style-type: none"> <li>- existing environmental conditions should be preserved and not be impacted by the wind farm</li> </ul>	<ul style="list-style-type: none"> <li>- flat, horizontal and tranquil coastal landscape is inappropriate to host vertical, moving turbines</li> <li>- industrial developments contradict rusticity and unspoilt nature</li> </ul>	<ul style="list-style-type: none"> <li>- unspoilt nature and unobstructed landscape as precondition for tourism</li> <li>- national park region</li> </ul>

	<b>Protest Group / Communities</b>	<b>BUND</b>	<b>EnBW</b>
<b>Interests</b>	<ul style="list-style-type: none"> <li>- prosperous tourism industry</li> <li>- satisfaction of tourists and citizens</li> <li>- natural and unspoilt environment as a foundation of livelihood and quality of life</li> </ul>	<ul style="list-style-type: none"> <li>- protection of nature</li> <li>- environmentally-compatible construction of offshore wind farm</li> <li>- exhaustive environmental investigations and monitoring</li> </ul>	<ul style="list-style-type: none"> <li>- build Baltic 1 and make it fit into the landscape</li> <li>- climate-friendly energy production and supply</li> <li>- generating revenues</li> </ul>
<b>Conflicts with Baltic 1</b>	<ul style="list-style-type: none"> <li>- impacts on tourism</li> <li>- different environmental impacts</li> <li>- increased risks of ship collisions</li> </ul>	<ul style="list-style-type: none"> <li>- ship collisions and environmental damages</li> <li>- unclear impacts on birds, whales and adjacent nature preserves</li> <li>- potential visual impacts on landscape</li> </ul>	<ul style="list-style-type: none"> <li>- environmental conflicts are mitigated based on prior investigations</li> <li>- risks for ships are very unlikely as wind farm is far away and well-marked</li> <li>- wind farm is hardly visible from coast and effects on tourism very unlikely</li> </ul>
<b>Storylines</b>	<ul style="list-style-type: none"> <li>- visual impacts impairs tourism and results in economic losses</li> <li>- increased risks of ship collisions and environmental damages</li> <li>- planning and assessment are unclear and not transparent</li> <li>- planning process is unfair</li> </ul>	<ul style="list-style-type: none"> <li>- wind farm project contradicts existing development plans</li> <li>- uncertain environmental impacts</li> <li>- insufficient scope of assessments does not justify a pilot project</li> <li>- Baltic 1 is a political project</li> <li>- summation effects are unclear</li> </ul>	<ul style="list-style-type: none"> <li>- environmental impacts are kept to minimum</li> <li>- wind farm has even positive effects on local environment and economy</li> <li>- investigations, assessments and monitoring help to expand knowledge about potential impacts</li> <li>- risks for shipping and tourism are unlikely due to large distance to wind farm</li> </ul>
<b>Action strategies</b>	<ul style="list-style-type: none"> <li>- according to the legal framework</li> <li>- written representations, hearings, better arguments</li> <li>- questioning of planning practice</li> <li>- symbolic strategies (human chains, demonstrations)</li> </ul>	<ul style="list-style-type: none"> <li>- detailed consultation response to draft plans</li> <li>- little media attention</li> <li>- collaboration with NABU</li> </ul>	<ul style="list-style-type: none"> <li>- fulfilling imposts</li> <li>- engaging with and involving local context</li> </ul>
<b>Knowledge construction</b>	<ul style="list-style-type: none"> <li>- personal experiences</li> <li>- deconstruction of assessments</li> <li>- reference to local expert knowledge</li> </ul>	<ul style="list-style-type: none"> <li>- own expertise, onshore experiences</li> <li>- drawing on findings from planning assessments</li> </ul>	<ul style="list-style-type: none"> <li>- based on surveys and experiences from onshore wind farm</li> </ul>
<b>Attitudes towards Baltic 1</b>	<ul style="list-style-type: none"> <li>- complete rejection of wind farm</li> </ul>	<ul style="list-style-type: none"> <li>- Baltic 1 should not be permitted without further investigations</li> </ul>	<ul style="list-style-type: none"> <li>- wind farm is crucial for reducing CO<sub>2</sub>-emissions, supplying clean energy and brings economic benefits</li> </ul>
<b>Spatial constructions</b>	<ul style="list-style-type: none"> <li>- flat, horizontal and tranquil coastal landscape is inappropriate to host vertical turbines</li> <li>- industrial developments contradict rusticity and unspoilt nature and coast</li> </ul>	<ul style="list-style-type: none"> <li>- offshore area is sensitive habitat with many unknowns and uncertainties</li> </ul>	<ul style="list-style-type: none"> <li>- quantifying environment and metric understanding of landscape</li> </ul>



### ***Federal Country of Mecklenburg-Vorpommern – Planning Authority***

Land use planning for offshore wind farms in territorial waters (12nm-zone) is part of spatial planning and is thus subject to the jurisdiction of the Länder (federal state). The spatial development programme (LEP) of the federal state also includes suitable areas for siting wind farms. But in Mecklenburg-Vorpommern the existing programme had to be extended towards the offshore area to cope with novel challenges arising from the intentions to build wind farms in territorial waters. However, regional (federal state) planning plays a crucial role for the normative preparation and provision of suitable areas and for the implementation and regulation of infrastructure projects offshore.

But the role of the federal state of Mecklenburg-Vorpommern towards Baltic 1 is two-fold. On the one hand, the federal government promotes the establishment of renewable energy as part of the renewables discourse of the federal government, and on the other hand the federal state level is in charge of the first planning stage. So the goals and interests of the federal state comprise the promotion and implementation of renewables as well as the implementation of institutionalised spatial planning for specific facilities at the local level. According to these responsibilities, the Ministry of Labour, Building and Regional Development (MABL-MV)<sup>33</sup> conducted the spatial planning procedure for Baltic 1 and came to the conclusion that the wind farm application can progress to the licensing stage, in which technicalities and matters of detail should be sorted out. Parallel to the planning procedure for the Baltic 1 wind farm, the MABL-MV found itself constrained to extend the Spatial Development Programme (LEP) to coastal waters to create a legislative context for building offshore wind farms and to “ensure a conflict management between the demands of new technologies (offshore wind energy sites), tourism and nature protection and traditional sectors like shipping, fishing and defence at an early stage” (MABL-MV 2005a:5). However, the planning-related context and the suitable areas for offshore wind farms were only set out at the same time as the planning for Baltic 1 was progressing. That is why the representative of MABL-MV retrospectively regards the whole planning process as a mutual learning process (Interview, planning authority, 2011).

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<sup>33</sup> The Ministry of Labour, Building and Regional Development has been restructured to the Ministry of Energy, Infrastructure and Regional Development.

The positive planning evaluation of the project was based on three key aspects: the relatively small size of the wind farm; its conception as a pilot project to provide regional companies with the opportunity to get involved in and gather experience in the offshore wind industry; and to tackle climate change. But, at least, the economic legitimisation of the wind farm had to be revised later, as the initial intention to involve local companies in the construction process “turned out to be false, unfortunately” (Interview, planning authority, 2011)<sup>34</sup>.

While the regional planning procedure is usually concerned with the contemplation of general planning issues and land use conflicts in order to prepare the licensing process, technical specificities of the siting of the wind farm reside within the remits of the licensing procedure<sup>35</sup>.

### ***Agency for Agriculture and Environment – Licensing Authority***

The licensing process of offshore wind farms in the 12nm-zone is under the jurisdiction of the Agency for Agriculture and Environment (StALU)<sup>36</sup> at the regional administrative level. It is in charge of the execution of legal provisions from the federal, federal state and European levels in the remits of agriculture and environment. The StALU in Stralsund implemented the licensing process for Baltic 1 according to the Federal Control of Pollution Act (BImSchG) in 2005.

The goal of the licensing procedure is to reach informed consent about specifications of the wind farm by conducting different assessments, such as an EIA prescribed by the BImSchG. But since the planning process for Baltic 1 had not been optimised and had been conducted in a ‘learning-by-doing’ way, general issues had to be re-considered which should have been negotiated and cleared up in the planning process (Interview, Licensing Authority, 2010).

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<sup>34</sup> This is because the project was taken over by EnBW after the license had been granted and large parts of the construction were performed by non-local companies.

<sup>35</sup> A regional planning procedure is not required for onshore wind farms, as the weighing of interests has already been considered in the designation of priority areas. But the siting of offshore wind farms still requires a preceded regional planning procedure, despite designated priority areas, due to the unknown planning territory and insufficient knowledge about the interaction between a wind farm and the local marine environment (Interview MABL-MV, 2011). However, the individual implementation of the regional planning procedure and the licensing procedure suggests that the whole process of making decisions about offshore wind farms is not yet optimised.

<sup>36</sup> StALU = Staatliches Landesamt für Landwirtschaft und Umwelt, was renamed and is now called Staatliches Landesamt für Umwelt und Natur (StAUN) (Agency for Environment and Nature)

The activities of the agency were confined to the normative standards of the BImSchG, which included the commission of assessments, initiating a consultation process as well as a public hearing. By consulting external experts to summarise and evaluate environmental impacts of the wind farm and to provide recommendations for a decision, the agency guarantees an objective stance while maintaining a powerful position to make a neutral decision. But the consultation of external experts is also owed to the fact that the licensing authority lacks in subject-specific and resource-dependent capacities. However, ensuring neutrality has not always been that straightforward, since the agency is also concerned with the assessment of environmental issues itself. So, other departments within the agency were entrusted with environmental assessments, which led to an internal conflict of interests, which was used as a point of criticism by opponents (for details see section 8.3.2)

The licensing authority is also in the powerful position to select consultees. Skilled and specialised contributions of public agencies are evaluated as more valuable than the ones from the public and alleged lay people. The licensing agency considers the wind farm as an object of planning and pursues a pragmatic and goal-oriented strategy to fulfil a daily task, even though the licensing of Baltic 1 was not a routine practice. It also conceives of conflicts as existent because of variously affected interests that need to be negotiated according to the legal regulations, but seems to weigh these interests unevenly by given more importance to quantifiable and scientifically verifiable knowledge from experts (see sections 9.4 and 9.5 for details).

### ***Districts of Nordvorpommern and Rügen***

The next administrative level of stakeholders comprises the districts adjacent to the wind farm site. Although they do not have any direct decision-making power over the offshore space, they are regarded as statutory consultees and can comment on onshore implications that may affect their jurisdiction. The districts that commented on the Baltic 1 plan were Nordvorpommern and Rügen<sup>37</sup>.

The former administrative territory of district Nordvorpommern is situated 15km south of the wind farm site and includes the peninsula Fischland-Darß-Zingst that faces the wind farm from south. After having checked the plan for Baltic 1 with all relevant departments of the district, the district only identified issues regarding the

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<sup>37</sup> The two districts of Nordvorpommern and Rügen, along with the independent city of Stralsund, were incorporated into the new district Vorpommern-Rügen, as of structural reorganisation of districts in Mecklenburg-Vorpommern on 4<sup>th</sup> Sept. 2011.

planned compensatory measures according to the impact regulation scheme. Immature and faulty ideas of compensatory measures were deemed to render the state of the then existing development plans unacceptable<sup>38</sup>.

The district of Rügen is situated about 28km east of the wind farm site and its administrative area consists of the island of the same name, including a few smaller islands around the main island, such as Hiddensee which directly faces the wind farm from the east. The island of Rügen is the largest German island and is a popular tourist destination, similar to the Darß peninsula.

Although being open-minded about renewable energy, the wind farm is seen more critical as concerns and apprehensions regarding expected negative impacts of such a large wind farm and its “interactions with tourism, shipping, fishing and nature protection could not be cleared up” (Consultation response, District of Rügen, 2005:2). Essential to the rejection seem to be resolutions by the district council that date back to 2001 which clearly speak against offshore wind farms. Moreover, the rejection of wind energy is also positioned in the regional development concept (Regionales Entwicklungskonzept) of Rügen which clearly factors wind energy out and evaluates offshore wind farms in a highly critical manner by stating that state-of-the-art wind turbines are rejected and that the renewable energy supply should be optimised by supporting various decentral energy sources that are compatible with interests of tourism, recreation and nature protection (Regional development concept Rügen, 2002:56).

The regional efforts to reject offshore wind farms clearly contradict the ambitions of the federal state of Mecklenburg-Vorpommern to designate appropriate offshore wind areas and to promote offshore wind energy. But it also raises issues of power and authority of different administrative levels, as the district does *de facto* not possess any decision-making power over the offshore area (see Chapter Nine). Therefore, the district also claimed further responsibilities of local agencies over this area, which should be involved in the licensing process and thus attempts to perform a normative appropriation of that space. This eventually embraces political conflicts between the jurisdictions of certain administrative levels.

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<sup>38</sup> Hence, the district of Nordvorpommern seems only to consider environmental issues as impeachable, which is quite surprising given the vociferous and vast representations from coastal communities within the district.

The wind farm is claimed to have severe impacts on the flourishing tourism industry, fisheries, and existing shipping routes and to clash with environmental interests of the district. Uncertainty about possible positive aspects is confronted with “certain losses in fishing” (Consultation response, Rügen, 2005:3) and in other industries. The district rather neglects positive aspects stated in the wind farm plan as uncertain, whereas negative impacts were itemised, quantified and underpinned with statistical data. Besides the more tangible overlap of interests and values, the district of Rügen also criticises inadequate and deficient planning and assessment procedures in order to question the legitimacy of the wind farm as a pilot project.

### ***Action Group ‘Don Quichotte’ and communities of Prerow and Zingst***

Also local communities were relevant for the planning process. The coastal communities that are exposed to the wind farm site turned out to be the stimulating and strongest oppositional power against the wind farm. Those were the communities of Prerow and Zingst on the Darß peninsula which administratively represented citizens living in these communities. However, these communities were not regarded as statutory consultees or experts and were not actively consulted in the planning process and licensing process. They were rather just informed about the planned project and requested to submit comments on the draft plan.

Both communities felt individually affected and were concerned about the adverse economic onshore impacts caused by the wind farm, which would contradict their actual aims and interests to provide and maintain a prosperous communal structure, satisfaction and high quality of life for their citizens. Their concerns are shaped by the apprehension that tourism is by far the most important economic driver for the communities and the region is thus characterised as a tourism area, whose constitutive basis is a pristine and natural coastal area (see section 5.2.1 and Chapter Seven). Other arguments stress contradictions, inconsistencies and failures in planning, conducted assessments and evaluations, which particularly refer to an insufficient risk analysis of potential ship accidents. The actual concerns that inform the attitudes of the communities are explicitly exposed in the consultation response of the Zingst community.

“[One core concern are the] Impacts of the planned construction of a wind farm at this place north of the Darß with 21 turbines through the deformation of the scenery and the interference with the flourishing tourism businesses within the community of Zingst, as well as direct effects on the community and the municipal enterprises in the spa industry due to the character as a Baltic Sea Spa Town and now acknowledged seaside health resort.”  
(*Community response, Zingst, 2005*)

These unfavourable circumstances and the manifold personal affectedness of the communities led to the foundation of the protest group ‘Don Quichotte’ under the direction of the then mayor of Prerow. Because of the lack of having a say in the decision-making process for local communities that feel affected and in order to have a bigger influence and to voice their interests towards the wind farm project, the protest group “Don Quichotte” was converted into a local voting bloc in the town of Prerow called “Rettet Prerow” (Save Prerow), which ran for the municipal council. In the local elections in 2004, the voting bloc was elected to become the largest faction in the council of Prerow and gained the mayor’s office<sup>39</sup>. However, their capability to influence the decision remained less successful as the wind farm could not be prevented, but particularities could be enforced.

The political strategy of forming a voting bloc was accompanied by more factual arguments to delegitimise the wind farm project, as previously mentioned. In its consultation response the community of Prerow presented details of 800 flaws of the planning process and the assessments in order to question the legal foundation of the wind farm. These flaws did not just include formal and procedural flaws, which also harked back to the regional planning procedure, but also reasons of how the community will adversely be affected by the wind farm which are meant to be depicted incorrectly in the assessments. Consequently, with more than 700 pages (including attachments) the consultation responses turned out to be very profound, detailed and excessive because of the meticulous consideration of any kind of aspects that were addressed in the assessments.<sup>40</sup> Given the intention to delegitimise the wind farm on grounds of a detailed deconstruction of the rightfulness of the proposed project and to demonstrate how multifariously communities are affected, the communities also criticised the lack of time they were given to prepare their response. Finally, communities also unsuccessfully tried to file a lawsuit against the positive wind farm decision, but were dismissed as not having a legal standing due to their legal non-affectedness because of the large distance to the wind farm site<sup>41</sup>. Other symbolic action strategies included the collection of signatures and the

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<sup>39</sup> Moreover the leader of the protest group mingled with the FDP (Free Democratic Party), which held a clear anti-wind stance back then. This stance is possibly grounded in the necessary subsidies to shove the transition to renewable energies that thwarts the free-market liberal tenor of the FDP.

<sup>40</sup> The basic intention of such an action strategy is grounded on the enforcement of interests on the strength of better objective and pertinent argumentation, in which, in the sense of *Habermas*, the better arguments prevail and additionally constitute power.

<sup>41</sup> See Chapter Six on affectedness.

formation of a human chain to demonstrate a common resistance against the wind farm, but which were only valued as pure polemics (Interview, protest group, 2010).

### ***Tourism Association Fischland-Darß-Zingst***

The Tourism Association Fischland-Darß-Zingst was founded as a consortium and community of interests in 1991 in order to pool and promote common tourist interests. In 1997 the consortium was renamed 'Tourism Association Fischland Darß-Zingst'. The tourist association consists of members from hotels, restaurants, cultural and recreational institutions, municipal and spa administrations, communities, commercial businesses and private guest houses in the district of Nordvorpommern. It is a touristic marketing organisation for mastering public relations more productively and regards itself as a lobbyist for the communal and private tourism providers of the region.

The tourism association participated in the licensing procedure as a recognised association, submitted a statement to the draft plan and was also involved in the prior regional planning procedure. At the beginning the tourist association did not welcome the wind farm project and actively opposed it. But after having realised that the wind farm could not be prevented from being built the association essentially changed its attitudes and attempted to come to terms with the wind farm. The arguments against the wind farm were substantiated by three main issues: the increasing risk of ship collisions with the wind farm; the close proximity of the wind farm site to the coast; and the improper legitimisation of the wind farm. During the planning process the tourism association collaborated with the protest group to jointly stand against the wind farm.

The tourism association almost only raised and explicated technical aspects and shortcomings of the planning process and assessments, which somehow leads to a depoliticised rhetoric in the argument. Focusing on technical, planning-related and more tangible aspects against offshore wind farms in order to delegitimise the Baltic 1 was perceived to be strategically more promising than arguing with tourism-oriented objections. An essential line of argumentation refers to the rebuttal of the instrumentalised 'pilot character' argument in order to delegitimise a purportedly decisive factor for justifying the wind farm. Other arguments made the point that consultants are partial, biased and prejudiced and stressed that the entire planning

process is primarily shaped in a goal-oriented way to enforce the construction of the wind farm, which contradicts the imperative of an open and unbiased procedure. Therefore, the tourism association urged a value-neutral re-evaluation of impacts of the wind farm.

Definite tourism impacts remain rather silent in the early argumentation of the tourism association, which may be based on the uncertainty and lack of knowledge about tangible consequences for tourism. However, potential tourism impacts are reasoned with the pure presence and visual effects of the wind turbines that are deemed to be extreme burdens for tourism as well as for the pristine nature and unobstructed landscape which is meant to be destroyed. So, economic consequences are directly associated with technical implications as well as environmental conditions, but without giving a clear explanation of such a relationship.

However, the attitudes of the tourism association changed once the wind farm could not be prevented from being built. The wind farm was no longer challenged and was instrumentalised for own purposes after it had reached the construction stage.

“Of course, no region can allow closing its eyes to climate change. Ultimately, Baltic 1 will supply green energy for thousands of households, which would do credit for the concept of a national park region. Despite all reluctance, we will learn to regard the wind farm as our ecological contribution and to actively promote the project in public relations. An additional building at our future harbour in which our guests could be informed about the wind farm and where technically-interested people could book an excursion would be imaginable. A mistrustful and suspicious view towards the horizon will probably last long, always associated with the hope that no stroke of fate will befall us.” (*General Manager of tourism association, in National Park-Info 18, 2008:9*)

So, the tourism association deliberated on possibilities of “how the wind farm can be offered without damaging the image of the region” (Interview, Tourism Association 2010)<sup>42</sup>. But this ‘make-the-most-of-it’ attitude is accompanied by other and more critical storylines. Although the tourism association attempts to emphasise positive aspects of the wind farm, the risks of collisions still persist and lead to a “bitter overtone”. So “latent fears regarding collision with vessels still exist” (Interview, Tourism Association 2010).

Retrospectively, the Baltic 1 wind farm project is assumed to be a politically desired project. The wind farm was desired by the industry and politicians and was thus

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<sup>42</sup> However, this utterance implies that the wind farm is still perceived as disturbing and detrimental to the region.



pushed through in the planning and licensing process. The lobby for renewable energy is supposed to be too strong to successfully struggle with, because “broader economic interests have the priority” and “innovation was pushed forward” to “invigorate Rostock to become an offshore industry site” (Interview, Tourism Association 2010). Economic interests are connected with the creation of jobs, which is repeatedly regarded as a ‘knockout argument’ that made advocates of the wind farm too powerful. As soon as the argument to create jobs as a benefit of the development of offshore wind farms is adduced, “environmental issues are permissively pushed away” (Interview, Tourism Association 2010). These descriptions clearly mirror the ideas of ecological modernization as the hegemonic discourse.

Earlier comments did not point to the necessity of wind farms as a renewable energy to tackle climate change. The wind farm project was not critically appraised and only unilaterally constituted as being disruptive to the local physical and social environment and technologically unjustified. After the successful construction of the wind farm the attitudes of the tourism association changed of necessity towards a more economically open-minded way to approach and appraise the wind farm. Nevertheless, in the end, pertinent technological and planning-related storylines gave way to a more political reasoning of why the wind farm could not be averted.

### ***Bund für Umwelt und Naturschutz Deutschland (BUND)***

The BUND (League for Environment and Nature Conservation)<sup>43</sup> is one of the biggest non-profit environmental organisations and the driving societal force for sustainable development that operates nation-wide. Unlike other globally-acting environmental organisations, such as Greenpeace and WWF, the BUND is concerned with local and regional environmental issues and operates at these levels. As an external, but non-statutory, expert the BUND is involved in the constitution of environmental laws, ecological concepts and strategies, and participates in public hearings and consultations on environmental issues. So, the BUND is usually consulted for infrastructure projects with expected environmental impacts, whereas voluntary members with respective expert knowledge create statements and reports.

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<sup>43</sup> Also known as Friends of the Earth Germany; German representative of the Friends of the Earth Network.

The BUND advocates wind energy in general and offshore wind energy in particular, due to better capacities and wind conditions. This fundamental attitude is also expressed in the positioning paper from 2001:

“The BUND welcomes the considerable strengthening of wind energy, coming into effect through Renewable Energy Act. However, this general support does not include an unconditional use of this energy type: Interests of nature and landscape have to be considered and ensured during installation and operation of the wind turbines. [...] The coastal and marine areas of North and Baltic Sea are of great national and international importance due to its natural features and its flora and fauna. [...] Construction and operation of offshore wind farms may have numerous impacts on the marine environment. In our opinion, additional scientific concomitant investigations are required in order to evaluate whether the widespread expansion of offshore wind energy happens in harmony with nature protection or at its expenses.” (*BUND 2001:8*)

This position of the BUND clearly reflects an internal conflict of interest when it comes to the siting of wind farms on local scale due to potential adverse environmental impacts. The BUND does not unilaterally emphasise the climate change storyline, but rather accentuates that local environmental conditions can be disrupted. Such an inner-ecological disunity between the local protection of nature and climate protection becomes even more obvious with regard to offshore wind farms, since there is even less knowledge and more uncertainty about impacts and cumulative effects than about wind farms onshore. This context made the BUND’s support for wind energy conditional. Wind farms are only justified in places where permanent ecological damages of the nature and the local environment can be excluded (see section 8.3 for details on the inner-ecological conflict).

The internal reconciliation of both strands finds its expression in the term of ‘ecological compatibility’ of wind farms. Offshore wind farms should only be built in an ecologically compatible manner to avoid adverse effects on the local environment. However, the term ‘ecologically compatible’ may relate to a compromise between the two positions but is not free of problems.

The BUND admittedly had some powerful possibilities to influence the final appearance of a wind farm, but was also restricted by its own stances and the inner-ecological conflict which may lead to a loss in credibility as soon as particular wind farm projects are opposed too fiercely. Socialising with the media and publishing comments on wind farms have to be proceeded in a very careful way, in order to avoid misleading and one-sided portrayals (Interview, BUND, 2011).

Given its general stance, the BUND tends to evaluate the scoping and the conducted environmental assessments as insufficient to fulfil the alleged character of a pilot project and dismisses the pilot project as a political intention. A pilot study should have involved better, longer and more exhaustive environmental assessments to do justice to a pilot project as proposed by the federal state government as well as the initial developer. But regarding Baltic 1 the BUND comes to the conclusion that “the political and economic arguments are clearly dominating at the expense of nature and landscape” (Consultation response, BUND, 2005:4).

### ***Energie Baden-Württemberg (EnBW)***

EnBW Erneuerbare Energien is a full subsidiary company of EnBW (Energie Baden-Württemberg) which is the third largest energy supply company in Germany situated in Karlsruhe, Baden-Württemberg and the current operator of Baltic 1. As described earlier, EnBW did not develop the wind farm from the beginning and only acquired the wind farm in 2008 after it had been granted consent for construction. This is why EnBW did not participate in the planning and decision-making process. Offshore Ostsee Wind AG made the application for the wind farm and went through the planning process. EnBW acquired the approved project and consummated its construction. These circumstances led to a commercialisation of an intended local project with a regional commodity chain and made previous legitimisations untenable, as criticised by opponents. This argument is related to the central criteria for approval of providing local investors and companies with the opportunity to gather experience in the offshore industry. In this light, EnBW was widely blamed for opportunistic actions because they bought an approved project to exploit the opportune institutional circumstances and they should not just be seen as environmental-friendly actors just because they build renewables, as they also do it because of financial incentives and profits (Interview, BUND, 2011).

But, in contrast, EnBW justifies its efforts by providing “climate-friendly” energy for 50.000 households and potential savings of around 167.000 tons of “climate-damaging” CO<sub>2</sub> (EnBW 2012a)<sup>44</sup>. Some stakeholders also perceive the project to have become more professional since EnBW had come into power (Interview, Tourism Association, 2010). Indeed, the tourist association intends to collaborate

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<sup>44</sup>Interestingly, EnBW does not seem to explicitly refer to climate change and wind energy as a renewable energy when promoting Baltic 1 on their website. The climate change discourse resonates only implicitly by referring to reductions of CO<sub>2</sub>.

with EnBW in promoting the wind farm as an important renewable project for the region and aims at integrating the wind farm in the sustainability concept of the region. EnBW highlights the “flagship project with signal effect” for the region. The positive economic effect also includes the creation of 12 jobs in the service station in Barhöft (EnBW 2012b).

By emphasising its practices regarding economic benefits as well as the positive repercussions towards the reduction of CO<sub>2</sub>-emissions and climate change, EnBW reproduces the ecological modernisation discourse of the federal government and tries to combine positive effects across scales.

### ***Other stakeholders***

In addition to the key stakeholders who shaped the debates over Baltic 1, a number of other stakeholders also appeared mostly in the arena of planning and tried to become involved in the discussions. These stakeholders mostly comprise superordinate authorities with expert knowledge that were invited by the planning and approval agencies to contribute to the planning, such as the Federal Agency of Nature Conservation, Armed Forces and the Waterway and Shipping Directorate, but also local actors, such as fishers and the national park authority of the Western Pomerania Lagoon Area National Park.<sup>45</sup> These actors, along with their interests in and concerns about Baltic 1, will be briefly depicted in the following table. Concerns of public authorities were mostly related to specific planning issues, whereas more locally embedded actors held a more critical attitude towards immediate and far-reaching impacts of the wind farm.

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<sup>45</sup> Nationalpark Pommersche Boddenlandschaft

**Table 6: Summary of other stakeholders**

	<b>Fishers &amp; local businesses</b>	<b>National Park Authority</b>	<b>Federal Agency of Nature Conservation</b>	<b>Armed Forces</b>	<b>Waterways and Shipping Directorate</b>
<b>Interests</b>	<ul style="list-style-type: none"> <li>- maintenance of their businesses</li> <li>- economic security</li> </ul>	<ul style="list-style-type: none"> <li>- maintenance of national park</li> <li>- nature perseverance</li> <li>- sustainable tourism</li> </ul>	<ul style="list-style-type: none"> <li>- no direct local interests</li> </ul>	<ul style="list-style-type: none"> <li>- use of offshore area for training and navigation purposes</li> </ul>	<ul style="list-style-type: none"> <li>- ensure shipping safety</li> </ul>
<b>Storylines</b>	<ul style="list-style-type: none"> <li>- wind farm has tendency to regulate occupations</li> <li>- wind farm endangers economic foundation and identity of locals</li> <li>- lack of influence in decision-making</li> </ul>	<ul style="list-style-type: none"> <li>- wind farm has unavoidable impacts on national park</li> <li>- impacts spoil the assets of the national park and region</li> </ul>	<ul style="list-style-type: none"> <li>- particular conflicting issues need to be considered</li> <li>- lessons from international case studies should be considered</li> </ul>	<ul style="list-style-type: none"> <li>- wind farm may cause disruptions</li> <li>- evidence for non-disruption of interests required</li> </ul>	<ul style="list-style-type: none"> <li>- wind farms implicitly pose a risk for shipping safety</li> </ul>
<b>Conflicts with wind farm</b>	<ul style="list-style-type: none"> <li>- loss of fishing grounds</li> <li>- severe visual disruptions</li> <li>- deterrence of tourists</li> </ul>	<ul style="list-style-type: none"> <li>- high impacts on bird habitats</li> <li>- change of beauty and nativeness of landscape</li> </ul>	<ul style="list-style-type: none"> <li>- likely impacts on porpoises have to mitigated</li> <li>- special piling methods required</li> </ul>	<ul style="list-style-type: none"> <li>- potential territorial overlaps</li> <li>- potential interference with navigation</li> </ul>	<ul style="list-style-type: none"> <li>- need for additional incidental provisions to ensure shipping safety</li> <li>- no hazards that transgress the usual extent</li> </ul>
<b>Attitudes towards Baltic 1</b>	<ul style="list-style-type: none"> <li>- wind farm must not be approved</li> </ul>	<ul style="list-style-type: none"> <li>- complete rejection of wind farm due to proximity to national park and expected impacts</li> </ul>	<ul style="list-style-type: none"> <li>- open-minded, neutral</li> </ul>	<ul style="list-style-type: none"> <li>- demand of better investigations</li> <li>- need of clearance certificate for radar and communication facilities</li> </ul>	<ul style="list-style-type: none"> <li>- no reasons for denying approval</li> </ul>

### **4.5.3 Practices of resistance – action strategies of opponents**

Opponents of the wind farm made use of various strategies to call attention to and to enforce their interests. In doing so, they stayed within the legislative framework. Almost all actors who had an interest in the prevention of the wind farm utilised the consultation process to expound their concerns, affectedness, and to refute the legitimisation of the planning process. By writing detailed consultation responses, opponents were given the chance to participate in the planning process of the wind farm, whilst unfolding their arguments as well as subjective valuations of the project. Such a practise is legally ensured, whereas the consideration of their counter-arguments remains unclear and not transparent for most opponents from the public. Other than statutory consultees or invited experts whose hints and demands have to be taken into account due to their legal background, planning authorities mostly regard opponents from the public as articulating only irrational, emotional and subjective concerns. That is why individuals from the public and communities rather drew on formal, technical and planning-related arguments to delegitimise the planning framework and to destabilise the legal justification of pilot project. So, by arguing against the wind farm from a planning-oriented perspective and by adopting a bureaucratic and formal language as well as statutes of law, opponents from the wider public attempt to overcome their imposed status as subjective lay people and to subtend more tangible and powerful arguments. Such rhetoric also serves to make the counter-arguments sound more profound and sophisticated in order to make an eloquent and more powerful contribution to the decision-making process instead of relying solely on personal valuations and concerns.

Further legal steps such as lawsuits were only repeatedly threatened with and were taken into consideration for later steps. Filing lawsuits is a possible and very common practice in Germany for taking action against bulky infrastructural developments. However, for Baltic 1 lawsuits only remained a threat. A lawsuit was abandoned by the communities and protest group as soon as it became obvious that it would not have been successful, so that the litigators did not become liable for potential costs (Interview, protest group, 2010). Although filing lawsuits seems to be an eligible approach to prevent developments, suing against offshore wind farms is rather ambivalent due to the unclear legal standing of communities and the legal protection in coastal waters. Communities only have a legal standing if they can plead that their subjective rights are infringed, which is difficult to prove in terms of offshore wind farms as they are not located in the municipal territory. That is why

two lawsuits from coastal communities against the Nordergründe offshore wind farm in the North Sea were dismissed in 2008 and 2009. The legal standing of communities is basically non-admissible because they are, in legal terms, unaffected by the wind farm due to the large distance to the wind farm site. Even though communities have basically a subjective right to take action against developments that may shape and damage the image of the community and thus unfavourably impinge on the community, it is very unlikely that offshore wind farms change the overall appearance and the structure of a place due to the large distance from the coast (FEST 2010). In legal terms, offshore wind farm are not seen as dominating the appearance of a community, which would make them eligible to file lawsuits. Similarly, the appealed decline of the economic potential of communities “as a result of alleged negative impacts on tourism fail because of the missing rigorous presentation of causality” (FEST 2010:477). The same would apply to the status of a spa town which is not associated with the development of wind farms. So communities have no *locus standi* against offshore wind turbines and lawsuits are likely to become dismissed on grounds of a lack of legal admissibility. So FEST (2010:478) states that “it is de facto ruled out that a community can appeal to the influence of the municipal territory through the visibility of the wind turbines at the horizon for any of the currently planned wind farms in territorial waters.” Unlike communities, some expert consultess, such as the BUND, have *locus standi* but are rather reluctant to proceed against offshore wind farms due to internal credibility issues.<sup>46</sup>

Resistance to the wind farm project has mostly been performed within the legal framework by submitting written responses to the development plan and by attending hearings. But opponents also left the prescribed legal arena and appropriated the public space to make the wider public aware of their concerns about the wind farm project. Symbolic practices in public space, such as the human chain along the beach between the towns of Prerow and Zingst and the collection of signatures, served to demonstrate common solidarity and protest of citizens against the wind farm, but did not have any direct effect on the decision-making. So demonstrations, human chains

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<sup>46</sup> But the BUND brought legal action against two wind farm proposals in the North Sea, Butendiek in the EEZ in 2003 and Nordergründe in territorial waters. The first one was dismissed, because organisations do not have any authorities in the EEZ, The latter one was abandoned after a settlement and a payment of 800.000€. This was heavily criticised by other local environmental groups and opponents who were not eligible to take action against Nordergründe and led to accusations of corruptibility of the BUND.

and the collection of signatures are only seen as pure polemics without any legal efficiency (Interview, protest group, 2010).

In order to be more effective in real politics and to have access to the control mechanism the non-parliamentary position was abandoned by the protest group when they turned themselves into a voting bloc. This was a unique and lasting strategy to resist the project and led to some success, as they formed a regional voice and represented a large number of people from different communities. Organised as an elected local voting bloc that governed the community of Prerow, opponents were able to accompany the project more closely, were allowed to participate in hearings and thus had a bigger influence on specificities and subtleties of the project, but could not prevent the wind farm either.





## **CHAPTER FIVE: THE OBJECT - OVERVIEW OF CONFLICTS OVER OFFSHORE WIND FARMS IN SCOTLAND AND GERMANY**

After having outlined the background of offshore wind farming in Scotland and Germany as well as the stakeholders, their interests, concerns and conflict-related practices of the case studies in the last chapter, the conflicts that emerge from this stakeholder constellation will now be analysed in detail by turning the attention to fundamental conflict lines as well as their formation and underlying arguments. The different conflicts over offshore wind farms identified within both case studies assemble and conflate essential storylines invoked by key actors. This first analytical chapter serves to link the empirical descriptions of the preceding Chapter Four with the subsequent analyses of key themes in the Chapters Six to Nine.

### **5.1 Conflict lines Argyll Array**

The No Tiree Array opposition group is the main antagonist who informs the conflicts over the wind farm. But there are also a number of stakeholders who directly shape conflicts, and whose stances to the wind farm remain rather ambivalent, such as the SNH, ARC and in particular the TCDT. Space-related conflicts over the Argyll Array have manifested through the activities of the TCDT and NTA and are rooted in their clashing interests and values. Identified key conflict lines directly related to and emerging from the Argyll Array involve broad but uncertain social and cultural changes on Tiree, economic impacts that are related to tourism involving visual implications, and possible environmental impacts of the wind farm. Conflict lines are constituted by people from Tiree who fear that their culture and identity would be sacrificed for the wind farm. There are also indirect and more universal planning-related conflicts materialised through the siting plan of the Argyll Array, which will be addressed next. It will be essentially shown that the conflicts over the Argyll Array are framed by a discourse of change based on the place-shaping capacity of the wind farm whose materialisations are expected and feared to change the appearance of the island and the lifestyle of the islanders, determined by their place-based identity.

#### **5.1.1 Onshore impacts – change of structure and image of the island**

Due to its vicinity and undecided O&M strategies the Argyll Array is meant to provoke enormous repercussions for Tiree's culture, and the lifestyle and identity of

its community. Those effects clash with the interests of many islanders. This key conflict line revolves essentially around the question about the structural modifications for Tiree the wind farm is supposed to induce, and to what extent such changes are desired or rejected. All conflicting parties agree that the wind farm will cause changes to the island and its community, but the conflict arises from the divided desire of changes and diverging understanding of how changes will manifest. The likely alterations that the wind farm will bring to Tiree make the island a contested space.

The issue is how the wind farm is expected and feared to have impacts on the island and its current community that consists of second home owners and incomers as well as native people whose families have been living on the island for many generations. The conflict manifests in the question of how change is thought and feared to take place and includes two interrelated dimensions. The first dimension is related to the physical and structural transformations of the island caused by the construction, operation and maintenance strategies for the wind farm. The physical appearance of Tiree might change according to the chosen O&M strategy. Unknown strategies gave rise to speculations about onshore impacts. Therefore, the master planning process was set up to address possible strategies and to discuss associated effects. A second dimension involves social and economic changes resulting as concomitant circumstances from the respective strategies and physical transformations.

According to the onshore scenario mapping, the construction, operation and maintenance of the wind farm can either be completely undertaken from the island, completely offshore or partially onshore and offshore, including various transport (mothership, helicopters, vessels) and infrastructure options (buildings, platforms), which would bring differently strong effects for the island. The scenario with the largest impacts on the island would be if the wind farm is completely constructed and operated from the island. Such a scenario would require vast infrastructural changes in terms of housing, buildings and roadwork in order to build accommodating onshore facilities. This is why some respondents to the consultation believe that Tiree does not provide the conditions to accommodate such a large-scale project, which necessitates enormous structural changes.

“Its residential housing, schooling, water supply, roads, transport, harbour, airport, medical facilities and more are on a scale in keeping with a small island community. In every respect, the existing infrastructure of the island is totally inadequate for the proposed development. It will take massive work and upheaval to provide adequate facilities, and the

impact on the environment will be huge and irreversible.” (*Consultation response, public #28, 2010*)

“If the Argyll Array proceeds as planned, the island of Tiree will be home to the structures, traffic and facilities of a town-sized industrial development. An estimated 60 helicopter flights per day will fly over its land and shores. Trucks will travel on wide 2-lane highways where single track lanes now stand. Buildings will be built where crofters now farm and their sheep graze. Up to one third additional houses will need to be constructed – not one of them for an islander. A vast energy factory will deface the island’s natural beauty and change its peaceful community forever” (*Consultation response, public #28, 2010*)

Moreover, opponents are happy with the current infrastructural conditions which make Tiree unique and also fear that potential infrastructural improvements would only serve the wind farm and may exclude local residents.

“We got our roads, we got our harbour. These are the things that make Tiree prime. We have the best health services in Scotland. I could be in Glasgow from here in an hour. And it probably takes longer from the suburbs of Glasgow to get to a hospital, because of the airplane. (*Interview NTA, 2011*)

However, further implications of change induced by O&M strategies relate to incomers and an abrupt increase of the population of the island. A small number of incomers who work in a support base and control centre can be absorbed by the community, but several hundred people to construct and maintain the wind farm from Tiree may not easily be accommodated without necessitating pervasive changes.

‘They could end up putting 300 people on the island, offshore construction workers, who would come in and out every day to do their work; have their helicopters. 300 workers plus their families. [...] The school could not absorb this amount of people, neither can the infrastructure, the roads, water, electricity, housing ... It would totally change Tiree. What we will have afterwards is not going to be Tiree anymore.’ (*Interview NTA, 2011*)

The social disruptions of the small island community are especially feared to be caused by the influx of foreigners, “because they have the skills to do this, be they Danish, German or Dutch” (*Interview NTA, 2011*). Those people are supposed to come to the island because of pure economic reasons. They essentially differ from the people who come to and live on Tiree out of choice and who seek a particular lifestyle.

“The first is economic migrants and people who come here through choice. People who are chasing a lifestyle, rather than chasing the dollar. This is probably the biggest disparity. [...] People come here because it is not spoilt, because it is clean, because it is safe, it is pristine. [...] We are trying to protect Tiree from the fraud, we are trying to protect what makes Tiree so different from anywhere else, and it really does, it really is a beautiful place to live. The economic migrants they would come here and embrace the place, it is a decision process to make the effort to come here.” (*Interview NTA, 2011*)

Construction workers who come to the island for work are considered to be different from the people who live on Tiree and do not fit to the island, as they represent a different lifestyle. They do not come out of choice and in search of the unique features of Tiree and are therefore thought to be less capable of assimilating themselves with the island and put pressure on the community. This is assured to be harmful to “the cohesion of the community” (Consultation response, public #66, 2010). Foreign workers are even considered to co-opt the island’s traditional culture and thus alter its peaceful social communal structure and may introduce the negative accompanying symptoms of urban life, such as alienation and crime.<sup>47</sup> Such a storyline produces a certain ‘otherness’ by constructing potential incomers who do not understand the life on the island as different from the islanders. And, vice versa, the people who currently live on the island are constructed as special. Tiree would change from an agriculturally and rurally shaped island that is founded on crofting to an industrialised island that does not stand out from any other place anymore. Thus, the island would lose its identity and distinctiveness that is characterised by and accrued from its tranquillity, remoteness and rusticity.

This reflects the fundamental storyline of the opponents claiming that the wind farm is supposed to change not just the physical and visual appearance of the island, but also its cultural lifestyle and social particularities that have evolved over many years due to the remoteness of the island. In particular, social transformations that might be brought in by alien people and their ‘otherness’ are feared, as the small island community cannot cope with such a large number of incomers, without scrutinising its existing qualities and way of life. Indeed, the Argyll & Bute Council also calls for the consideration of the lasting impacts that large numbers of incomers would have by claiming that “impacts on smaller remote communities such as Tiree from the influx of new servicing personnel should be considerable both in social and economic terms, (housing, health, education)” (Argyll & Bute Council, consultation response 2010:10).

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<sup>47</sup> In this context, opponents exemplify the change antithetically by referring to the houses on Tiree that are permanently unlocked, to the general absence of crime, apart from a bit of drink-driving, and to great helpfulness and cooperativeness within the community (Interview NTA, 2011). “With an increase of population through the workers coming to Tiree, many people may feel unsafe to continue as they have done...everyone leaves their homes & cars unlocked, new people may not understand this way of life.” (comment at consultation event August 2011, IRONSIDEFARRAR, Appendix 8, 2012b:10)

However, this is only one perspective to look at things, which presents one level of this conflict line between the potential O&M strategies and its feared effects onshore. Another perspective is presented by hopes and interests of the TCDT which contribute to a further manifestation of this conflict line. The TCDT constructs Tiree as a place that suffers from the same issues as any other rural area at the west coast, which already experiences some changes of and threads to the community, imposed by a steadily declining population that may result in the loss of basic public services, such as school, health facilities and shops, which would again lead to further declines in the population. So some islanders welcome the opportunity provided by the wind farm plan to generate new jobs, to increase the population and to secure public services. Nevertheless, they are also aware of the transformations the wind farm will bring to the island by saying that the Argyll Array will have “the biggest impact on Tiree since the Viking invasion” (Interview TCDT, 2011). But they also acknowledge opportunities for the TCDT to incorporate the changes less harmfully for the community and the island by offering their expertise to the developers.

“So if they gonna have hundreds of new jobs on Tiree and 80% of the people are coming to the island, that’s a lot of houses. And they need to be spread around the island. Not just in one place. So they need to talk to us about it, where to put them, to spread them around. And this would have implications for water supply, electricity, sewage and all those things. They need to be talking to us about that now.” (Interview TCDT, 2011)

A better connection to the mainland is seen as advantageous in many respects (Interview, TCDT, 2011), but it also reverses the argument of the opponents to maintain the remoteness of the island. So the TCDT does not deny that there will be a substantial change on the island, spatially and socially, but it seeks to cope with, control and alleviate the potential changes in order to obtain benefits for the community and to minimise undesired effects.

But if the wind farm is meant to change the physical and cultural characteristics of the island, it is also important to ask to what *status quo* the characteristics of the island and identity of the islanders are linked. This has also been seized by the TCDT as well as the NTA.

“I mean it is not gonna be a gradual change, you know, over the years a place changes. But this will have massive implications. [...] To the older folk here, it will be a desperate change.” (Interview NTA, 2011)

“The only benefit that could come to Tiree is through compensation. But you can’t price what people have here.” (Interview NTA, 2011)

Transformations of the island are meant to be rapid and abrupt, which makes the experience of change even more drastic for people. The expected transformations cannot be compensated either. Moreover, it is argued that changes are perceived differently by native people whose families have lived on the island for many generations. But in contrast, this is challenged by the fact that initial protests mostly came from incomers and second-home owners and that the wind farm is supposed to provide better and permanent job opportunities for people from the island. That is why native people are seen as being more open-minded towards the proposal (Interview TCDT, 2011). So, local long-time residents may also regard the wind farm as a new but legitimate form of land use that can be beneficial for the local economy (VAN DER HORST & VERMEYLEN 2011). The understanding of a natural and successive change of places and the sense of place is exploited by the TCDT to relativize the changes that the Argyll Array may induce, and stands contrary to the argumentation of the opponents:

“But there are also people around the table who were born and brought up on Tiree, their parents were born and brought up on Tiree, as were their grandparents. Gaelic speaking has seen changes on the island over the generations and for them this is just another change. It is not frightening, it is bigger than most things, but it is not frightening. The place has changed, places always change; everything changes.” (Interview TCDT, 2011)

Since places are always subject to change, the wind farm is just put into perspective as another change, even if it is a huge and far-reaching transformation that affects the life of people. Demarcating the scope of alterations implies the very subjective question to what status of place (place-based) identity is related and what character of Tiree is threatened by change. But this is a very subjective issue depending on the individual perception and place attachments of different stakeholders.

“For people who moved to the area, they fall in love with the place of the day they arrive, so that is Tiree for them. But in 1975 there were no electricity poles, now there are electricity poles everywhere. So is Tiree with or without electricity poles. In the war there were 2500 servicemen stationed on Tiree. So there is concrete buildings, there is bomb shelter, they had gun emplacements, and they are still there. Is it that what Tiree is? Was it just before the war, is that what Tiree was?” (Interview TCDT, 2011)

This quote implies that even Tiree, which is meant to have preserved its traditional roots and particularities of a Hebridean island, has always been subject to material and socio-cultural changes whose artefacts are still visible and testify previous modifications. Social memories only refer to one particular visual and cultural image of the island. However, this reasoning also insinuates that physical changes inevitably involve cultural and identity-related alterations over time. But both

conflicting parties agree that the wind farm would cause further and new changes to the island and its community. The difference between opponents and more neutral stakeholders is embedded in a dissimilar sensitivity to and perception of change and the implications attached to it. This is what constitutes this conflict line. But it also shows that the Tiree community is not a homogenous group. There are two different place identities on the island.

### **5.1.2 Visual impacts – not only an aesthetic matter**

Another conflict-line that has been informing the contestation of the Argyll Array includes visual impairments. Since the proposed site is very close to Tiree (>5km) its visual presence on the island is meant to become ubiquitous. In particular, the undefined size, array and number of turbines shape the fears of a wind farm that may dominate the face of the island. Therefore, questions regarding visualisations have come up from the very beginning of the planning process:

“One of the big complaints that many people had was that we had no way of visualising of what the Array would look like. And the developers wouldn’t give us a visualisation and a photomontage. And their reason was they couldn’t say how accurate it would be at this stage.” (*Interview, TCDT, 2010*)

“It should be made a requirement of all developers to present within 12 months of any proposed development comprehensive / detailed montages of any development. We on Tiree have not had a single montage presented by the Argyll Array in any public forum. What has been offered has been from other sites of no relevance to Tiree and, cynically, have been of turbines ½ size and ½ density.” (*Consultation response, public #145, 2010*)

Many stakeholders claim that visualisations of wind farm developments should be an integral part of an environmental assessment, as the early handling of this issue is considered as insufficient. Due to the lack of visualisation, the NTA created a few drastic montages which even fuelled the concerns of people.

But this issue has also been addressed by the TCDT which asked the members of the community in early 2011 to mark places from where they wanted to have photomontages created and urged SPR to provide realistic visualisations. Such visualisations were then provided by the SPR considering two different turbine sizes from different places on Tiree, which made people even more conscious about the visual impairment through the wind farm. In this context, the Skerryvore Lighthouse, a local landmark, gains strategic importance. It is often strategically employed to exhibit the dimension of the wind turbines, which will be much taller than the lighthouse. It is used as a familiar spatial point of reference to put the wind farm in context.





**Figure 9: Photomontage, comparison of wind turbines with Calmac Ferry and Skerryvore Lighthouse (taken from NTA 2012b).**

Also the NTA's basic claim to move the wind farm 35km offshore is based on pure visual grounds, as the wind farm would not be visible from such a distance. But this postulation also includes a political statement. This 35km border was merely defined to upset and to challenge the Scottish wind energy agenda, as 22km would also considerably reduce the visibility and would still be within the margins of territorial waters (Interview NTA, 2012). Moving the wind farm further offshore is also associated with more difficult physical conditions and additional costs for the developer and might not be feasible and worthwhile anymore. This, somehow, implies the suggestions to abandon the wind farm.

The pure visual impact of the wind farm made opponents argue for other types of renewables which are less visible. This storyline usually includes the preference of tidal energy, which is supposed to have a much higher potential to be exploited in the waters around Tiree.

"I do feel, on the other hand, in this area there is far more benefit from tidal, which has a much lower footprint and effects and less ecological issues. I think in such an environmentally fragile and iconic landscape, as the west of Scotland is, I think you have to look at the long term which is reducing the visibility and things." (Interview NTA, 2011)

Arguing for tidal energy as a more efficient and less harmfully affecting energy source is a common argument of wind turbine opponents who fear visual disruptions. This has also been reflected in the opposing storylines related to other wind farm plans in Scotland.

“Lastly, we didn’t think that wind farms would be the answer of the problem of renewable energy, because the winds are only blowing for a certain amount of time. And there is tidal energy there every day. This is more predictable.” (*Interview Monreith & District Action Group, 2011*)

“And the visual impact would be neglectable compared to an offshore wind farm. And it is a pretty good technology. The project in France has been operating since the late 1950s or something like that, quite successful.” (*Interview KWB, 2011*)

Tidal energy is not only preferred due to its less likely visual effects, but also the physical conditions are meant to be more suitable for tidal energy. Moreover, tidal energy facilities may also have a bigger potential as a tourist attraction than a wind farm (Interview Monreith & District Action Group, 2011). A high support and fewer conflict potential of tidal energy have also been attested by DEVINE-WRIGHT (2011b, 2011c), which may even enhance emotional attachments to and distinctiveness of places. Another concern is that the visual interference of turbines cannot be mitigated adequately.

### **5.1.3 Economic interests and tourism impacts – not only a local matter**

Another storyline that has been dominating the debates about the Argyll Array comprises feared effects of the wind farm on tourism and associated economic changes. Ensuing from the physical and social changes of the image of the island, impacts on tourism are feared to have an even more economically detrimental effect for the people on Tiree. Visual disruptions as well as the structural modification of the island are supposed to have adverse impacts on the island’s tourism industry. Hence, this conflict line reflects the interference of the wind farm with tourism on Tiree. However, the conflict between wind farms and tourism is also framed by national entanglements, including contradictory survey results from Visit Scotland, culminating in the inquiry session with Donald Trump at the Scottish Parliament.

Tourism is a fragile but valuable component of the island’s economy. But the significance of tourism for the local economy is again perceived differently, which informs this conflict. The underlying ambiguity of the significance of tourism diverges between the NTA and TCDT and thus also constitutes the suppositions about the effects on tourism. Both stakeholders highlight the importance of revenues

from tourism for the viability of the economy, but the perception of the extent to which impacts on tourism impinge on the local economy varies.

“It does mean we are against the Argyll Array so close to the shore and its massive effect on tourism. [...] This is our biggest economic driver here. It is taking over from crafting and everything. About 40% of the income to the island, its major income source is tourism.” (*Interview NTA, 2011*)

“There is tourism as well. There has always been tourism on Tiree. It is quite a big part of the economy. But it is low-paid employment, it is very seasonal and in the peak-season a lot of work goes to labour coming in. [...] So, in terms of the impact on the local economy, I am not convinced that tourism is as important as some people think it is.” (*Interview NTA, 2011*)

On the one hand, tourism is meant to suffer from wind farms, as it is a huge component of the local economy. And, on the other hand, the impact on tourism might not be too momentous for the island’s inhabitants since the tourism industry is subject to seasonal variations and a lot of income from tourism generated on the island would leave the local economy anyway. In addition, the wind farm may bring permanent job opportunities. Such an understanding fundamentally frames the ambiguous perspectives of the islanders. But the question is how the wind farm would detrimentally impact upon tourism. Many opponents stated that the wind farm would have an impact on the tourism economy, but did not provide many clues regarding a causal link between the two factors<sup>48</sup>, as shown in the following quote:

“Tourism is an increasingly important factor in the economic survival of Tiree’s indigenous community and its future depends on continuing to attract the island’s regular and returning visitors. [...] How many people will travel 4 hours in a ferry to spend their time and money at an industrialised work-site? Islanders have put a major investment into building up their holiday home businesses (2500 beds). These [tourist] businesses are currently a sustainable and vital source of income. This investment and income will be destroyed by the creation of the wind farm development.” (*Consultation response, public #28, 2010*)

But the conflict with tourism became more obvious at other locations where offshore wind farms were also proposed. The likely impacts on the local economies that rely on tourism have been one crucial reason to drop the wind farm plans for the Solway Firth and Wigtown Bay.

“Scottish Ministers decided it would be best if these do not progress, on high levels of public concern, the potential of adverse social and economic impacts and some environmental impacts.” (*Interview Marine Scotland, 2011*)

“I mean tourism really is the only industry in this area, apart from farming. [...] They [tourists] won’t come, if they can see how the shore is full of windmills; that is not what

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<sup>48</sup> See Chapter Seven on this problem of causality between the presence of the wind farm and the claimed deterrence of tourists.

they want. [...] We could only see employment going down because of the effects on tourism.” (*Interview Monreith & District Action Group, 2011*)

However, the tourism conflict that is debated, negotiated and manifested at the local level also implicitly features a national component. This alleged local conflict line unites and combines two key national discourses of the Scottish Government. This includes the parallel promotion and implementation of offshore renewables and the continuing expansion of the tourism sector which is a crucial part of the Scottish economy. So the tourism conflict is a multi-level conflict that reaches from the local to the national level and comprises the fundamental question to what extent tourism can be reconciled with the burgeoning siting of renewables. According to the opponents, both industries can hardly been reconciled without causing drawbacks for one or another. In contrast, after its inquiry, the Scottish Government comes to the conclusion that wind farms and a prosperous tourism industry can coexist, but also emphasises the need for careful planning. While many people asserted that there would be a negative impact on tourism from renewables developments, no “witness has provided the Committee with robust, empirical evidence, as opposed to anecdotal comment and opinion, that tourism is being negatively affected by the development of renewable projects” (ECONOMY, ENERGY AND TOURISM COMMITTEE 2012:8).

Chapter Seven will revisit the relationship between offshore wind farms and tourism in more detail.

#### **5.1.4 Environmental conflicts**

Environmental conflicts occurred only recently in the debates over Argyll Array and seem to have played a minor role in the conflicting discourses. The NTA only took up on this issue in 2012 by referring to reports of environmental agencies. The environment-related arguments of the opponents make use of Basking Sharks and Great Northern Divers, upon which potential impacts are still unknown and not yet researched, to invoke another argument against the wind farm project. Those two environmental assets also motivated the NTA to argue for Tiree and its surroundings to become designated as a Special Protected Area (NTA website, 2012c). This reasoning is backed by the JNCC which clearly draws attention to the fact that the inshore areas of Tiree qualify as a Special Protected Area according to the UK selection guidelines (NTA website, 2012c). The recently increased significance of environmental issues for the NTA is reflected in an update of the weblog in November 2012 which now lays more focus on the reporting about potential local

environmental impacts, which have not been taken into account earlier<sup>49</sup>. Other environmental arguments refer to the potential of the wind farm to impinge upon the micro-climate, which may have unknown repercussions for the agricultural businesses on Tiree (NTA website, 2012a). This strategic shift towards exploitation of environmental issues was affirmed by the NTA, stating they “expanded upon these themes [...] when SPR tucked away a discreet announcement of an 18 month delay in the project [...] with specific reference to the Great Northern Diver and Basking Sharks” (An Tirisdeach 2012)<sup>50</sup>. A Special Protected Area status is deemed to have essential implications in the consenting process.



**Figure 10: Exploitation of environmental qualities to resist the wind farm proposal (taken from NTA 2012a).**

Other, more specific, environmental conflicts that have been addressed refer to the disturbance of migratory patterns of geese, which overlap with the wind farm site (Interview SNH Islay, 2011) and the consequences of the wind farm for the machair landscape, which depends on high wind speeds and strong wave activity, which may be altered and obstructed through the wind farm (Consultation response, public #201, 2010).

Environmental conflicts inherent in the siting of offshore wind farms will be considered in Chapter Eight in more detail.

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<sup>49</sup> Environmental issues have not been discussed in the Interview with the NTA in April 2010, although the mentioned JNCC report was published in 2009. However, the interviewee only mentioned that Tiree would have an ‘environmentally fragile and iconic landscape’. This was the only time ‘environment-related’ terms were raised during the interview, although the semi-structured interview left sufficient space to raise any concerns. Interestingly, the conflict with the Great Northern Divers was raised by the interviewee from the TCDT in March 2011 as it had been discovered in an early bird survey and was also displayed in the poster exhibition.

<sup>50</sup> This quote was removed from the NTA website during its update on 14<sup>th</sup> November 2012, but has been reproduced in An Tirisdeach on 1<sup>st</sup> June 2012.

### **5.1.5 Argumentative patterns – opposing storylines and counter-discourses**

The fundamental opposing discourse framing the conflicts over Argyll Array relates to uncertain operation and maintenance approaches, which may engender numerous impacts on and changes of the adjacent island. This depends on the selected strategy and the extent to which Tiree will be involved in the operation of the wind farm. Therefore certain implications of the wind farm have a place-shaping capacity. The storyline of change is also associated with the visual alteration of the seascape which directly leads to concerns about the effects on tourism which would again entail socio-economic changes. Hence, both storylines are basically directed towards, unwanted but also desired, physical and socio-economic changes taking place on the island, which could be prevented if the building of the wind farm is scrapped. In a nutshell, different understandings of place underlie the conflicts. Conflict lines are shaped by diametrically opposed perceptions of the current economic and social setting which in turn informs the apprehended consequences that change might bring for the island. The wind farm will arguably cause some changes, but debates revolve around whether the changes are seen as beneficial or disadvantageous for the community, according to the perspective and understanding of place. These two conflict lines regarding social and economic onshore impacts are strongly linked to uncertainties about the construction and maintenance strategies.

In comparison to other conflict lines, the clash of environmental interests with the wind farm seems to play rather a marginal role at the moment and has only recently been seized on. Definite environmental impacts remain rather uncertain. It seems as there is no need for opponents to exceptionally highlight and belabour on environmental impacts, as the more pertinent issues to them regarding socio-economic impacts onshore have been considered and discussed in the early planning process. This differs from and outshines the German approach which rather considers onshore impacts as less relevant<sup>51</sup>.

A third storyline is directed towards the political delegitimation of the wind farm and involves storylines of an economic inefficiency of wind energy and a global warming denial storyline, whereas the latter one is not explicitly used to destabilise the legitimisation of the Argyll Array. Both storylines are rather applied to deconstruct

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<sup>51</sup> However, this statement must be seen in the context of Baltic 1 which is a much smaller wind farm further offshore, with almost no physical changes at the adjacent shore (see 4.5).

and challenge the Scottish renewables agenda which is judged to be solely grounded on the use of wind energy. While climate change is a key justification for the increased siting of wind farms in Scotland, the climate change storyline has not clearly been invoked during the planning process at the project level. Although climate change is mostly absent from the debates and narratives about the siting of wind farms on the local level, a few stakeholders, e.g. from CATS, invoke a storyline that questions the existence of climate change. This, and the argumentative shift of the NTA, suggests the assumption that opponents and local anti-wind farm groups run into the danger to become anti-renewables groups as they sooner or later end up questioning the need of renewables when they have the feeling that a lot of their fears and uncertainties are rather downplayed in the decision-making process as subjective, less tangible and less quantifiable (e.g. impacts on tourism). The issues around the consideration of particular concerns and knowledge in planning will be highlighted in Chapter Nine.

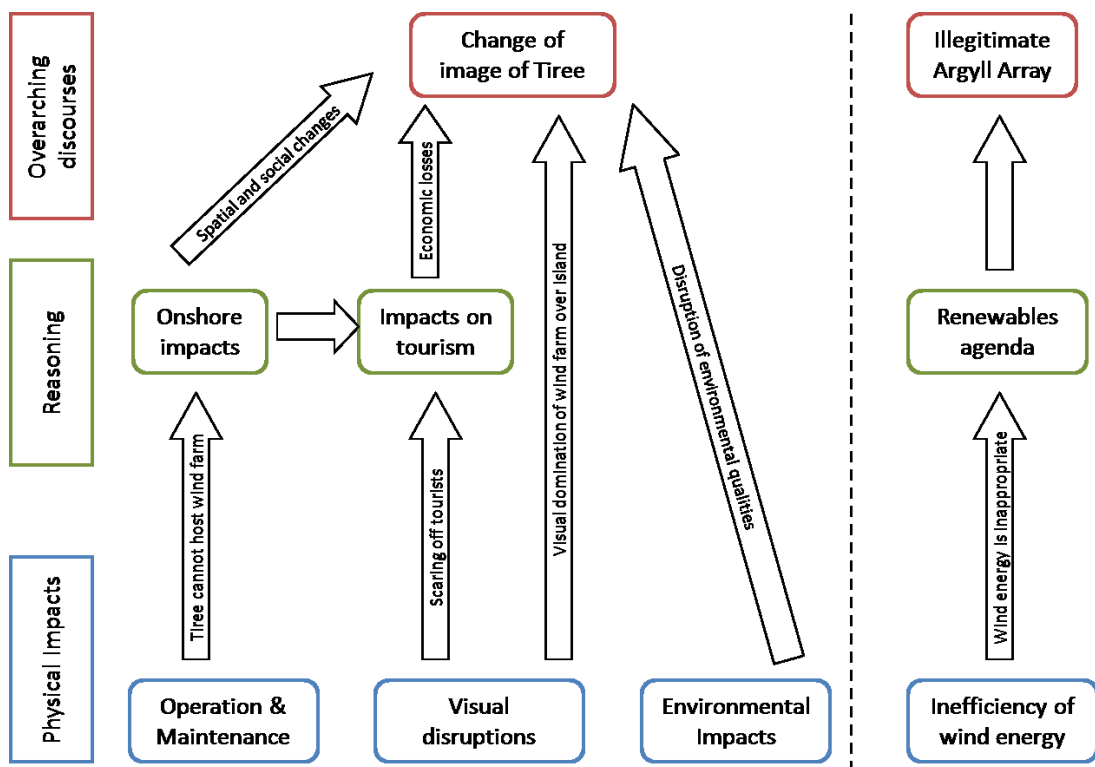


Figure 11: Argumentative patterns and storylines of opponents

## 5.2 Conflict lines Baltic 1

Local communities, the tourism association for Fischland-Darß-Zingst and environmental NGOs turned out to be the key opponents of the wind farm. There are several discourses of opposition to Baltic 1, which generally overlap between the antagonists and have been variously produced as counter-positions against the hegemonic ecological modernisation discourse monopolised by the federal state, federal government and the wind farm developer. This is why it is useful to examine the key conflicts over Baltic 1 separately in order to summarise and draw conclusions about the constitution of each conflict. The major counter-discourses against Baltic 1 comprise several environmental impacts, adverse economic effects for tourism and risks related to nearby shipping routes and are underpinned by conflicts of interest and value.

### 5.2.1 Visual Impacts and tourism interests

The establishment of the wind farm was fiercely contested in tourism-related arguments. The origin of this conflict is therefore meant to be the annihilation of the seascape and its far-reaching implications. In particular, citizens of the communities of Zingst and Prerow and the district of Rügen were concerned about potential negative impacts on the tourism industry from visual effects and a change of traditional landscape characteristics. This is explicitly explained by the former mayor of Prerow:

“We have a focus area of tourism. A main tourist area earns money because is different to others and by saying we have nature, nature, nature and that is where you feel comfortable. And there are small urban oases enclosed in this nature, like Prerow. Apart from this, we come up with a horizontal landscape which is not disturbed by anything. [...] That is the first reason; it has a pure scenery-related origin with possible economic effects on our tourism”.  
(*Interview, protest group, 2010*)

“To the community of Prerow as a focus area of tourism, the landscape and scenery is the formative factor and thus decisive for the acceptance of the village.” (*Consultation response, Community Prerow, 2005*)

So, particular structural features of landscape and nature are essential pre-conditions for a successful tourism economy. The appearance of a flat, natural and horizontally-shaped scenery and seascape is meant to be the fundamental feature of a coastal area to attract visitors because it differs from any other type of landscape.

Impacts on tourism and the local economy was also the main storyline invoked by the District of Rügen authority. In this argumentation adverse economic impacts are directly linked to and explained by visual damages that would originate from the wind farm. Damages would not only be restricted to the immediate surroundings of the wind farm:



“The visual impact zone of the wind farm does not end at 20km [as stated in the assessments]. This might be eligible for an evaluation of a landscape onshore, but at the sea it is not eligible due to the dominance of the landscape-alien wind farm structure. The worthiness of protection does not stop at the drawn line but goes far beyond. Wind turbines as high as 120-160m cause disruptions that reach far beyond the actual designated area of the wind farm” (*Consultation response, District of Rügen authority, 2005:3, 4*)

Such concerns indicate that there had been no specific knowledge about the actual impacts on tourism before the wind farm was built. So the concerns of local actors entail an uncertainty about the future conditions because there has been no other wind farm off the German Baltic Sea coast on which assumptions could draw. But the planning agency assumed that “there is a high likelihood that a substantial decrease in guest numbers can be ruled out due to the low change of the landscape image” (MABL-MV 200a:51). And “the planning agency comes to the overall estimation that economic losses in the tourism industry through the construction and operation of the wind farm are in all likelihood not expected” (MABL-MV 2005a:51). Although decision-makers have to cope with uncertainty too, they rather draw on what they perceived to be facts, such as the distance, assessments and expert knowledge, whereas the comprehension of the opponents is guided by their economic background and their subjective perception of reality including value-laden constructions of spatial conditions (see Chapter Seven for further details on the tourism conflict).

In a first summary, the tourism conflict is constituted by the notion that wind turbines would cause a decline of tourist numbers which is reasoned by storylines about the visibility of the wind farm, the unilateral dependence on tourism, uncertainties and fears about an economic decline, post-socialist efforts to develop a flourishing tourist industry as well as environmental damages. Thus, the wind farm project conflicts with the interests of the local population that relies on tourism.

### **5.2.2 Local environmental interests**

The second major conflict line is concerned with environmental interests that clash with the development of the wind farm. The offshore wind farm does not only have the potential to produce renewable energy, but it may also be the origin of some unknown detrimental environmental impact. In order to consider and assess these environmental impacts, the developers are required to initiate environmental impact assessments, which form the basic source of knowledge that is taken into account and negotiated in the planning and licensing processes.

For the Baltic 1 case study the environmental conflict turned out to be a multi-level conflict. A first dimension involves potential environmental impacts that are picked

up by local people as one motive to oppose the wind farm project. Opponents are concerned about environmental damages *per se* and for the sake of further repercussions for the tourism industry. Environmental interests are related to the killing of birds and the change of migrations routes, underwater noise emissions towards harbour porpoises (*Phocoena phocoena*) and the influence on the seabed including the benthos. Another storyline against Baltic 1 addressed close proximity to the National Park ‘Western Pomerania Lagoon Area’ which is seen as an evidence for the illegitimate location. Furthermore, opponents from the public also exploited contrary environmental interests that are embedded and positioned in national programmes and plans of the federal state.

But the definatory power over environmental conflicts is managed by the developers, experts from public agencies and NGOs, who are involved in the scoping and environmental impact assessments. They determine which environmental aspects are considered and investigated in the planning process. Opponents from the public mostly have only the opportunity to rely on and comment on these assessments by experts. This leads to another dimension of the environmental conflict over Baltic 1. The environmental conflict also exhibits a dimension beyond the practical engagement with impacts in terms of mitigation and compensation measures. It also takes place at a normative-epistemological level. This level includes the question about valid knowledge to classify, quantify and address environmental impacts. It is about the questions of who defines the knowledge, how much knowledge is relevant for the decision, what expertise is included in the decision and from where that (non)-knowledge is taken. These questions have become especially relevant since Baltic 1 was conceptualised as a pilot study to obtain new knowledge about particular issues. This normative-epistemological dimension is primarily caused by the decision-makers who decide on grounds of quantifiable knowledge and facts, although facts and definite evidence about environmental impacts remain uncertain. Knowledge about detrimental effects of Baltic 1 can only be obtained and detected through monitoring after construction (see Chapter Eight for details).

In addition, an inner-ecological conflict is reflected within the environmental organisations. On the one hand they are consulted as experts in the planning and licensing processes and are thus able to help shape the final decision and the ultimate appearance of the wind farm in technical matters. But on the other hand they are “caught between the two stools” of “promoting environmentally friendly alternative

energies” and of “being concerned about the local environment and animals” (Interview, protest group, 2010). However, whilst the environmental organisations may have a big say in planning offshore wind farms, they are also corruptible in terms of compensation measures. The representatives of the approval agency appreciate the dedication of those NGOs to the environment and their advocacy for renewable energy in general, but acknowledge their “reluctant understanding of climate protection when it comes to actual local projects” (Interview, Licensing Agency, 2010). So the role of environmental NGOs is widely seen as controversial. Local opponents feel environmental NGOs are concerned about the local environment, but when it comes to definitive measures to display their full power to prevent ecologically damaging renewables, they are rather hesitant and turn towards the global scale. Interestingly, the planning agencies communicate a contradictory opinion about environmental NGOs by stressing that they renounce their climate protection stances and turn towards the intervention at the local scale. This contradictory evaluation of NGOs may be owed to the personal attitudes and interests advocated by the local opponents and agencies. However, the self-image of the BUND differs from the public image in terms of power and influence as well as goals. They consider themselves as being advocates of the development of offshore wind farms but not at any costs. They express a pragmatic stance which highlights an ecological compatibility of offshore wind farms that is grounded on extensive research, monitoring and knowledge about environmental impacts (see sections on inner-ecological conflict in Chapter Eight for details).

Finally, the environmental conflict also contains the dilemma of implementing compensatory measures. In Germany, any environmental damage has to be compensated to the same extent as the damage. But this runs into difficulties in two respects. First, it is mostly difficult to quantify environmental impacts offshore and secondly it is almost impossible to carry out compensatory measures at sea. So compensatory measures either end up being exercised onshore, which may not be an adequate way to compensate the impacts offshore, or compensation can only be achieved monetarily. The latter one makes it quite easy for the developers and is evocative of “sale of indulgences” (Interview, licensing agency, 2010; Interview, BUND, 2011).

### 5.2.3 Shipping route – ‘Kadetrinne’

The collision of ships with wind turbines constitutes a considerable conflict line that especially finds its expression in narratives about the proximity of the wind farm to the shipping route ‘Kadetrinne’. The wind farm adjoins to one of the world’s most frequented shipping routes. This increases the risk of collisions with the wind turbines, which may also have severe consequences for the environment. The ‘Kadetrinne’ is a highly frequented shipping route in the Baltic Sea between Germany and Denmark that is used by 60.000 – 70.000 vessels per year (Interview, tourism association, 2010).

The wind farm site is 15km away from this route, and people fear that the wind farm would increase the risk of ship accidents, so that ships would crash into the wind turbines and resulting oil spills would cause severe environmental damages. This was a very common storyline of opponents which is rationalised with prior experiences and cultural prejudices. So, opponents have constructed the wind farm widely as an obstacle and artificial barrier.

“The vessels that go through increasingly serve to transport oil, especially from Eastern-European and Russian areas. So, also ships are used which don’t necessarily meet EU-criteria and which possibly have to be rated as unsafe. If a ship gets out of hand, which happened only 5 years ago ... [...] I even don’t want to imagine, ships that get out of hand, crash into a wind turbine, oil spills and we will have a huge catastrophe.” (*Interview, protest group, 2010*)

“And we have already had enough incidents of drunken Russian skippers who stranded their ships or when ship collisions happened.” (*Interview, tourism association, 2010*)

So knowledge that constitutes the fears about ship accidents is based on prior experiences of ships that ran aground onto a sandbank or incidents of broken and unmaneuverable ships that drifted away from the permitted routes. That is why some stakeholders call for a mandatory pilotage for the Baltic Sea in order to make shipping more secure.

Although ship accidents with wind turbines are rather hypothetical, it played a key role in the planning of Baltic 1. But because it is hypothetical, this conflict has been negotiated at an epistemological level. Assessments that examined the shipping security focused on the likelihood of incidents. Based on the recommendations of the BSH and WSD the planning agency draws the conclusion that a collision risk is kept within acceptable bounds as long as steady efforts for further improvements of shipping safety are guaranteed (MABL-MV 2005a:33).

However, opponents complain about a quantitative risk assessment which only considers the likelihood of ship accident and does not really take any emergency planning into account in case an accident happens. They are not interested in the likelihood of an incident, as an accident might happen the next day or in the distant future. They are rather interested in information about preventative actions that are taken in case of emergency to avoid negative effects of possible accidents.

#### 5.2.4 Argumentative patterns – opposing storylines and counter-discourses

The key arguments opponents raised against the wind farm are basically grounded on four potential impacts that conflict with interests from which existential concerns of an economic decline are deduced (see figure 12).

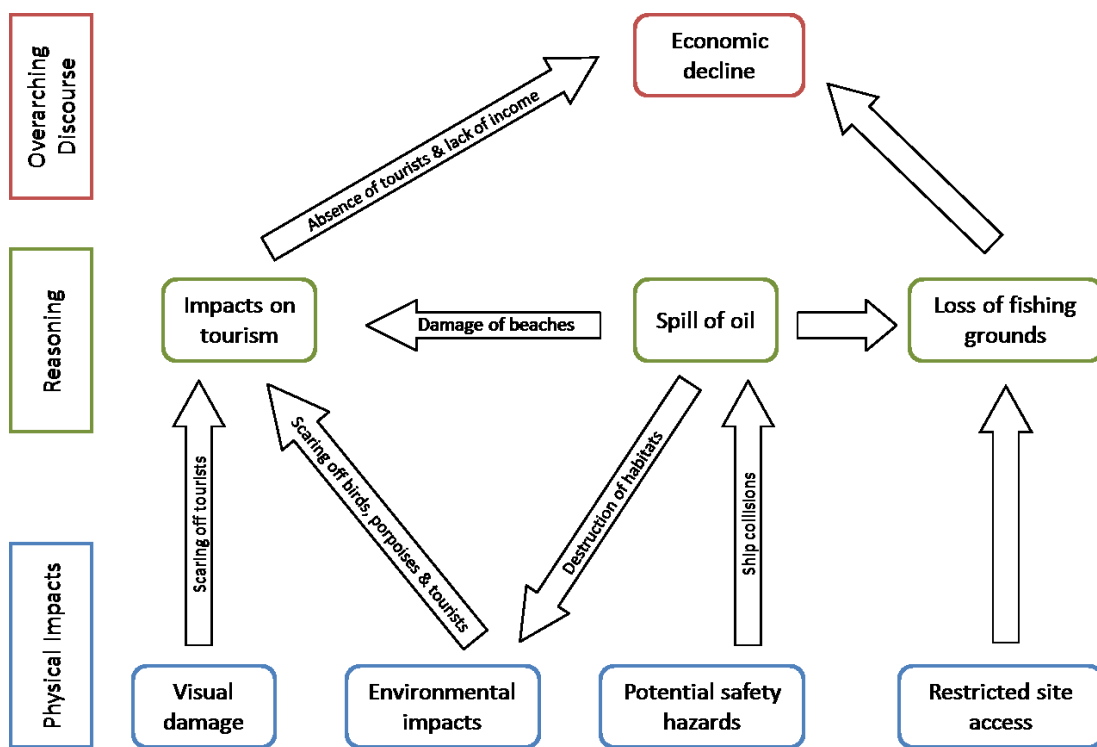


Figure 12: Argumentative patterns and storylines of opponents

Since the Baltic coast region heavily depends on revenues from tourism, all invoked counter-arguments serve to rationalise a feared decline in tourism caused by the wind farm. But a decline in tourism would only be induced by a change of tourism

structures and an absence of tourists and visitors from who generate income. So, the absence of tourists takes up the central notion in the arguments of local opponents, even though rarely explicitly articulated. So several storylines are invoked to justify how the wind farm would lead to the absence of tourists. First, visual damage to the landscape and a visual domination of the wind farm over the existing spatial conditions are regarded as a massive structural change of the traditionally flat landscape and unspoilt nature. An ‘industrial overprint’ is perceived to make the region less appealing to visitors. Secondly, environmental damage in terms of birds and whales that are scared off or even killed by the turbines would also make the area less attractive for visitors who are interested in enjoying untouched nature. Ship accidents are even worse, since they could destroy the whole coast for a long period of time and tourism would be ruined as well (see Chapter Seven for details). However, the potential loss of fishing grounds due to denied access to the wind farm site is also feared to have an impact on the local economy as fishers are restrained in their activities.

All the reasoning for these arguments is based on an uncertainty and risk discourse. Most arguments draw on assumptions, and general narratives of the anti-wind farm movement are reproduced and applied to the respective personal case. There are no indications of where these concerns stem from or on which grounds they are rationalised. The uncertainty discourse is maintained by subjunctive language describing the future situation of what would happen if the wind farm was in place. This discourse is even bolstered by the designation of an “experiment” which is conducted by the development of a wind farm in the respective area. The term “experiment” refers to different facets of uncertainty and always implies a certain risk, which is usually related to vague and unpredictable economic impacts of the wind farm, which make the wind farm morally questionable. But a risk is also supposed to be taken in terms of uncertain environmental effects. Storylines of unpredictable economic and environmental impacts are developed and delineated to enforce the prevention of the wind farm. Since these storylines do not rely on true facts that can be substantiated by empirical data, other and more tangible arguments are also pointed out. In so doing, all stakeholders similarly elaborate on deficiencies in the planning process and especially in the already conducted environmental and economic assessments. These tangible arguments serve to bring reasons forward to make the wind farm project more assailable and to question the whole institutional process of dealing with communities and the environment when it comes to locating

bulky infrastructures. The alleged inaccurate and insufficient assessments also raise moral concerns and questions of coping with social and environmental issues in the current planning and licensing procedure. Thus, moral concerns seem to resonate while challenging the planning procedure and seem to frame the reproduction of a discourse of uncertainty and risk as well.

Similar to Argyll Array, in the argumentation of the opponents there is almost no reference to climate change or to wind farms as a source of renewable energy. Only the tourist association emphasised the positive effects of wind turbines after the wind farm could not be prevented and the former mayor of Prerow only makes an implicit reference to renewable energies when explaining why wind turbines are less helpful to tackle climate change. But there is still a general absence of the climate change context. Opponents do not refer to the need, value, or benefits of renewables and do not question the necessity of wind farms. The wind farm is rather regarded as an intruder from outside which is supposed to disrupt the personal everyday life and of achievements of people as well as the current prosperity of the community. Hence, the communal and joint objectives of renewable energies seem to be (unconsciously) played down in order to emphasise personal harassments and adverse economic effects caused by the wind farm. Nevertheless, the argumentations do not follow a pure NIMBY logic, since the arguments do not include solely selfish concerns and parochial narratives. Firstly, all statements explicitly speak for a certain group of stakeholders (fishermen, tourism business) which would be equally affected by the wind farm. This seems to underpin the broad effects of the wind farm and to emphasise the large number of affected people. Secondly, detailed rationales and well-wrought argumentations also prevent these stakeholders from being accused of selfish parochialism of NIMBYism. NIMBYism in the case studies will be explored further in Chapter Six.

## **Chapter Six: THE TRIGGER — Affectedness**

### **6.1 Introduction**

The descriptions of both case studies have shown that most of the resistance was formed within the coastal communities, even though the Tiree community holds divided attitudes towards the wind farm project. Local opponents in both case studies stress the local non-suitability for hosting the wind farm. Although people oppose the development in front of their shore they cannot simply be characterised as NIMBYs (not-in-my-backyard), which refers to the phenomenon of the occurrence of opposition to a (generally desired) infrastructure development in a local area due to its potential negative externalities. As different conflict lines have demonstrated local conflicts are mostly founded on diverse interwoven space-related interests of local residents that clash with the siting of a wind farm.

Given these empirical findings, the following chapter is concerned with a reformulation of the theoretical approach to understand local opposition in order to leave the widely applied NIMBY ‘explanation’ behind and to launch another conceptualisation to understand local resistance. The question addressed in this chapter is: is there really a ‘backyard’ that can be quantified and used to explain and map opposition? First, it will be argued that NIMBYism is an inadequate notion to describe and especially to explain opposition against Baltic 1 and Argyll Array, as there is no such thing as a ‘backyard’ or ‘backyard-related motives’ as the trigger for opposition. It will then be shown that it is rather the affectedness of stakeholders that evokes conflicts as two-sided contradictions or antagonisms of interests and values. This chapter serves to stimulate a change in perspectives from the consideration of pure local opposition that facilitate NIMBY accusations towards the affectedness of stakeholders based on conflicting interests and values, regardless of spatial proximity.

### **6.2 Is there a ‘backyard’ ... ?**

NIMBY is a catch-all phrase of local opposition and suggests that people have positive attitudes towards a development as long as they are not personally confronted with it. This concept has often been applied to point towards local resistance against the siting of wind turbines, which are generally desired and positively perceived as source of renewable energy. Although often used as an interchangeable phrase to point to local protest, opposition and resistance, “the term



NIMBY is not a neutral descriptor” (HAGGETT 2010c:313). The use of the term has particular implications, stigmatises opponents, and leads to an explanatory impasse. Thus, the NIMBY concept has widely been criticised to obstruct the complexity of real motives and the related socio-political and cultural context of the formation of protest by accusing opponents of selfishness and parochialism (BELL et al. 2005, WOLSINK 2000, 2006, VAN DER HORST 2007, DEVINE-WRIGHT 2009a).

Only spatial references, such as locality, distance and proximity, seem to constitute the essence of the NIMBY theory which contends nothing else than people who oppose an otherwise wanted development or facility in their vicinity and locality. Therefore, “NIMBY is about ‘backyards’, implying very local protest” (HAGGETT 2010c:314) in “a geographical catchment area for selfish behaviour” (VAN DER HORST 2007:2706). This has led to various studies aiming at the determination and demarcation of a ‘backyard’ in order to quantify and locate opposition (e.g. JONES & EISER 2010). The mere physical vicinity to the proposed development evokes a suspicion of NIMBYism (NEVEU 2002). Therefore, measuring the proximity to unwanted and critical facilities is meant to be “the key to NIMBYism” (MICHAUD et al. 2008:21).

However, this spatial determinism has been discarded by many scholars, as they found evidence for variable results instead of a spatially linear increase and decrease of opposition (e.g. WARREN et al. 2005). Although some scholars have contested the ‘proximity hypothesis’ regarding onshore wind farms, a spatial explanation for opposition remains to inspire research studies which seek to describe and delineate features and origins of resistance to offshore wind farm projects on the basis of spatial determinants. This knowledge has not distracted studies from trying to define and demarcate people’s ‘backyard’, in order to determine the spatial extent of opposition and to overcome opposition and to reduce “the size of people’s backyards” (JONES & EISER 2010:3116).

Such a comprehension would also imply that the ‘backyard’ of coastal communities regarding offshore wind farms is considerably bigger than the ‘backyard’ for onshore wind farms, since fewer physical structures obstruct the flat seascape and the visibility of offshore wind turbines. In contradiction, the same understanding could also be construed differently, as offshore wind farms are further away from communities, which would result in a less vigorous opposition and may reduce the

size of the 'backyard'. So, physical proximity is "a particularly unhelpful way of thinking about the determinants of public acceptance towards offshore developments" (DEVINE-WRIGHT 2012:196). Aiming research at the delineation of spatial determinants and thresholds implies a certain geo-deterministic understanding which ascribes some rather dubious efficacy to physical-material conditions and neglects the social and structural conditions that may also determine the attitudes towards wind farm projects, beyond the significance of distance and visibility. Although the 'backyard' is a metaphorical and stylistic concept and visibility is widely regarded as a crucial determinant for the formation of opposition, it is rather precarious to link a 'backyard' merely to physical and spatial parameters, as this, again, neglects the real motivations of resistance and conflicts.

Secondly, as already mentioned, NIMBY only describes the frequent existence of local resistance against developments, be they generally beneficial as a common good or not, implying that this resistance is driven by self-interest and insufficient regard of a common and civic good, which makes NIMBYs parochial and selfish actors in conflicts. A NIMBY is not meant to "argue against wind farms per se, but would prefer not to build them altogether rather than having them in his or her own backyard" (DRENTHEM 2010:321), which clearly alleges them to act out of selfishness. Such an understanding makes it only easy to dismiss the attitudes of alleged NIMBYs as wrong. And it seems to be "an attractive excuse for institutionalised actors" (WOLSINK 2012:84) to avoid questioning underlying and structural factors of local opposition. In contrast, some studies even take the division between expertise and NIMBY attitudes explicitly for granted by regarding "entrepreneurs as local experts on the tourism issue and as local residents with a potential NIMBY attitude towards wind turbines in the area of their residence" (FRANTÁL & KUNC 2011:507). Hence, the objective of planning and research is mostly to enlighten the opponents about the rightness of a development and experts and to overcome the wrong NIMBY attitudes (AITKEN 2010a). But it cannot simply be assumed that resistance is due to pure ignorance, a lack of willingness to negotiate consensus or the reluctance to accept expert analysis. In contrast, more radical approaches claim "to remove the privileged status of the experts employed by industry and government and to provide citizens with opportunities to contribute to decisions about [...] issues that affect their own interests" (FISCHER 2005:129).

Thirdly, the NIMBY syndrome evokes connotations of powerful local citizens who are able to prevent the building of wind farms, and also a technocratic view of good

policy-making, based on the knowledge and objectivity of policy experts (MCAVOY 1999).

The concept also opens up a dichotomy between the individual interest and the public good by accusing local people to act out of pure self-interest and to disregard the common good (GIBSON 2005). Even though both protest groups on Tiree and the Fischland-Darß-Zingst peninsula were originally initiated by a few individuals, it is too naïve and problematic to accuse a whole group of stakeholders of collective selfishness without considering individual motives. Individuals certainly support the opposition groups to prevent the building of the wind farms, but because of different reasons. Furthermore, a one-dimensional NIMBY view obscures a diverging understanding of a greater and common good. With regard to wind farms NIMBY portrayals suggest a common good that relates to the inevitable use of renewable energy sources in order to avoid global damages through climate change. But opponents may have a different understanding of a public good or may refer to another public good than offshore wind farms as a mean to produce clean energy and to tackle climate change. They may have other priorities and their interests may be rooted in what they regard as a common good. A remote, traditional and agriculturally based island may be the common good for opponents on Tiree, as the current conditions of the island are rare and unique. Similarly, a flat, pristine and rural coastal landscape that attracts a lot of tourists who contribute to the preservation of the livelihood of many people may be seen as a public good by the opponents of Baltic 1. Local opponents may also challenge spatial inequalities and disparities in siting wind turbines.<sup>52</sup>

In summary, the application of a NIMBY label to describe attitudes towards offshore and onshore wind farms is problematic in several regards. It falls short on explanatory grounds and does not provide any valid explanation for actual motives of opposition. The use of a NIMBY label tends to discredit local opponents as being selfish, irrational and parochial. The use of a ‘backyard’ as a spatial entity to

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<sup>52</sup> “And if politicians say, Mecklenburg-Vorpommern has to further position itself within the field of environmental protection and renewable energy; that is why we need even more wind turbines; then I say we have a federal system. And in a federal system we treat everyone equally. Bavaria, they have only 3%, they should follow first before we retrofit 20%” (Interview, protest group, 2010). This quote relates to spatial inequality in the distribution of wind turbines and the perceived saturation of wind turbines in Mecklenburg-Vorpommern, but can also be interpreted as NIMBY behaviour when disregarding the context. However, the argument in the quote does not consider the inequalities of physical conditions; the better conditions for wind energy in Northern Germany and greater potential and use of solar power in Bavaria.

determine and quantify opposition is highly problematic, because it solely focuses on spatial determinants, such as distance, visibility and proximity, as key elements of opposition and neglects social, political and economic causes of opposition formation. So, the NIMBY concept is incapable of problematizing pluralistic attitudes towards wind farms shaped by interests and values that are variously affected by wind farm developments.

In principle, there is no such thing as a ‘backyard’ as a spatial or territorial construct that is constitutive to the formation of resistance or the manifestation and peculiarity of opposition. The location of opponents becomes only relevant in the context of their space-related interests that may variously be affected by the nearby wind farm. Thus, the visibility and proximity of a wind farm can be seen as one form of how stakeholders may feel concerned because of certain interests and goals. But visibility or spatial proximity alone cannot be the trigger for active opposition. Spatial references must be seen in conjunction with certain (space-related) interests, values and actions that may be affected and disrupted by the spatial proximity and visibility of the wind farm, as reflected in the tourism conflict (see next chapter).

The common NIMBY attitude in which the general advantageousness of a project is not contested, but its direct vicinity is deprecated because of individual disadvantages, has been rarely applicable to the opponents of Argyll Array and Baltic 1. Opponents rather rationalised their opposition by means of economic, environmental and cultural concerns and related interests that are feared to be adversely affected by a wind farm, as the case studies have demonstrated. Nevertheless, the existence of NIMBY accusations has also clearly been reflected in the two case studies and the broader debates, as the following two quotes show:

“Secondly, oil spills are feared. How seriously this is feared is anyone’s guess. Many things are instrumentalised to underpin emotions. This argument was utilised very often. [...] And if this doesn’t help, the protection of nature is brought up. People have been terribly worried about dying animals. This is very emotional ... wind farms are disliked and all possible topics are brought forward and instrumentalised. [...] But, in my opinion, this was coming from an emotional perception, from a non-acceptance. And all sorts of things are brought forward, nature protection, security, landscape, in order to buttress this somehow” (*Interview, licensing authority, Germany, 2010*).

“What we hear is the extreme, hysterical, not-in-my-backyard view of people who don’t want wind farms. That’s just emotion. However, we don’t know enough about the implications of wind farms. [...] There’re many unanswered questions, on which there is no empirical evidence, so people rely on the emotional arguments...” (*Economy, Energy and Tourism Committee, Scottish Government, Inquiry minutes, 18<sup>th</sup> April 2012; 2012:1284*)

Both statements reduce the oppositional behaviour of local people to personal emotions. They frame local concerns as irrational and unfounded which are either due to a lack of knowledge or contrast with the knowledge of experts. In contrast to an unemotional, objective and rational planning process, the expression of emotions is regarded as unreasonable and illegitimate (CASS & WALKER 2009). In accordance with academic literature (WOLSINK 2012), those NIMBY accusations have been imposed by technocratic authorities, whereas affected local citizens also act on informed, rational and legitimate grounds. Instead of bringing unfounded and irrational arguments forward, opponents against Baltic 1 and Tíree have mostly constructed arguments that refer to various local qualities that are feared to be damaged by wind farms and that may not be reconcilable with them. Those reasons may not make as much sense to other actors as they make to affected stakeholders, since planners and decision-makers are not personally affected.<sup>53</sup>

In conclusion, if the metaphorical catchword of an alleged ‘backyard’ is utilised, it should not be quantified on grounds of spatial references demarcated through decreasing or increasing strength of concerns about a development. It should rather be defined by the interests and values that certain stakeholders raise regarding a wind farm and that may be affected by the development, irrespective of their spatial location. As a consequence, the idea of a ‘backyard’ in terms of a territorial area that can be employed to ‘measure’ opposition becomes obsolete. The causes of opposition are primarily determined by non-territorial boundaries. It is the situative affectedness of particular stakeholders that constitute attitudes and conflicts in the first place and not their ultimate location. This does not mean that affectedness is not informed by visibility and proximity to an offshore wind farm, but these are not the only parameters that affect stakeholders. As the following section will show, inverting the focus towards the affectedness and affected interests of stakeholders also provides an opportunity to reject simplistic NIMBY portrayals.

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<sup>53</sup> In order to avoid accusations of NIMBYism, local opposing communities in both countries also stress the immature and imbalanced planning procedures, challenge either the rigorous renewables agenda in Scotland or focus on tangible and factual arguments (e.g. shipping safety) in Germany. But protest groups are also aware of potential NIMBY accusations: “Although KOWAG has tremendous local support it is important that our arguments against the Kintyre Wind Farm are well founded and not just seen as NIMBYism. Hence the support of influential organisations is vital if we are to persuade Ministers to withdraw the Kintyre Array from their plans.” (Kintyre Offshore Wind Farm Action Group, Newsletter, April 2011)

### **6.3 ... or affectedness of stakeholders ?**

As described in the previous Chapter Five most conflicts over offshore wind farms in Scotland and Germany are predominantly anthropocentric and arise from socio-economic interests of affected stakeholders. Conflicts are mostly informed by antagonistic and competing social, cultural and economic interests that clash with the siting of the wind farms. An exception is the inner-ecological conflict line which stresses local environmental impacts and which is initially constituted by experts and specialist authorities rather than local opponents from the public.<sup>54</sup>

This already indicates that it is rather the affectedness of particular people which turns them into stakeholders and which provokes their oppositional activities. Affectedness means being affected by something, such as the siting of a wind farm. As the different conflict lines have demonstrated, different people can variously feel affected by an offshore wind farm development. This affectedness depends on people's interests, values and ideals. Opposition is based on affected interests or on the clash of interests, but not necessarily on self-interestedness as NIMBYism purports. There is no reciprocally causal relationship between affectedness and the alleged NIMBYism. NIMBY behaviour may be admittedly described by mere affectedness, unless it offers any statements about its causes. Once the causes of affectedness are examined, NIMBYism becomes obsolete, since the reasons of people's affectedness are revealed.

The two case studies have illustrated that affectedness through offshore wind farms is basically shaped by three criteria: the effectiveness of impacts; societal structures and constraints emerging from the planning and siting practices; and the visibility and distance of the wind farm site. However, the examined conflicts have also demonstrated that these factors can be entangled with each other. First, impacts refer to externalities of the offshore wind farm that are feared to affect and interfere with stakeholder interests in various ways (landscape and environmental protection, fishing, shipping, tourism). Secondly, structural conditions that inform affectedness refer to the regulatory framework and the approach to build and maintain the wind farm that impinges on the degree of affectedness (extent of public participation, different O&M approaches that affect people on Tiree). Thirdly, the pure proximity

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<sup>54</sup> Here, the potential environmental damages are also invoked as an argument for socio-economic concerns in order to substantiate socio-economic interests, such as a reliable tourism industry grounded on an unspoilt and unharmed nature. This argument will be elaborated further in Chapters Seven and Eight.

also generate affectedness of people through visibility. Based on subjective aesthetic reasons, the visibility of the wind farm is meant to affect tourism and economic practices due to the perceived incompatibility of a technical facility within an otherwise unspoilt tourism area (see tourism conflict, Chapter Seven).

The affectedness of people on Tiree is impressively described in the following quote.

“With Tiree being so small and being so limited in size, and a small population, everyone on the island is a stakeholder; everyone will be impacted in one way or another. And most people will be impacted in every single way possible, from what you see out of your window, from how long it takes you to take your children to school and how big and how many shops there are. Everything will change.” (*Interview TCDT, 2011*)

Affectedness materialises through the interests, values and everyday actions of stakeholders that may be disrupted by the wind farm. Again, the alleged ‘backyard’ does neither span over a spatial or territorial area nor is it bound to a certain location either. It is rather constructed through the range of activities of stakeholders whose interests may be compromised by the wind farm. This is mirrored in many consultation responses and objections against Argyll Array from people who do not come from Tiree. They may come from many places around the UK and know Tiree and have interests in the island, such as holiday memories, surfing, recreation, and therefore feel affected by the wind farm and fear that those qualities will be lost. So the conflicts over offshore wind farms in Scotland happen more on a national level as, on the one hand, all the planning procedures are centrally driven by Marine Scotland and, on the other hand, opponents carry conflicts and their affectedness across scales whilst demonstrating in front of the parliament, using virtual media and bringing concerns to the attention of tourists and visitors. The conflicts over Baltic 1 remained more localised and only locally and regionally embedded stakeholders were involved in the controversies.

When focusing on space-related interests as the essence of conflicts, it is hardly possible to refer to *local* opposition and to delineate the ‘backyard’ of the opponents. Conflicting interests are bound to the stakeholders and their whereabouts which are not necessarily located close to the wind farm. Even if most protests against Baltic 1 were initiated by coastal communities located in visibility distance to the wind farm, their interests that clash with the construction of the wind farm were not exclusively related to visibility. Their rationales also comprised environmental and economic interests that cannot be simply explained with spatial proximity or visibility. The term *local* opposition is thus only constructed by means of the location where

resistance arises in order to point towards the spatial proximity of the sites of the wind farm and the protests. With regard to offshore wind farms it is even more difficult to speak of local opposition as it is unclear to what term *local* relates to. Local can only refer to the adjacent inhabited coastline. There is only resistance from stakeholders who are affected by specific externalities of an offshore wind farm or who have competing space-related interests directed to the offshore site where the wind farm is located. Such an interest-based affectedness also presents the comprehension of statutory consultees.

Statutory authorities involved in the planning process due to their interests in the offshore wind farm or its site are often situated far away and do not exhibit any spatial reference and relationship to the site. Many public and environmental agencies that have reservations against the wind farm are situated in distant places. Statutory consultees are not consulted due to their proximity to the wind farm. They are consulted due to their jurisdictions and space-related interests in the offshore area in which the wind farm is built.<sup>55</sup> So, opposition from the general public should also only be explained through the interests and land uses that clash at the wind farm site or conflict with spatial externalities of the wind farm. As already suggested, this likewise implies that the ‘backyard’ should be demarcated on grounds of wind farm-related interests and the range of actions instead of a territorial and spatial construct, which makes the idea of a ‘backyard’ redundant. If the catchy term ‘backyard’ is applied at all, it should not be related to and defined by spatial categories. The ‘backyard’ in terms of the spatial distribution of attitudes towards a wind farm rather stretches along the interests and values of stakeholders, regardless of their position relative to the wind farm site. However, this does not deny that interests and values towards a wind farm project can be shaped by proximity and visibility. But those factors are not the only ones that inform attitudes, interests and values.

Both case studies have shown that personally perceived affectedness dominates the argumentation of stakeholders and thus the conflicts over offshore wind farms. Arguments are invoked to strengthen personal positions and interests. Spatial conditions are instrumentalised to underpin the personal affectedness and positions. Particularly constructed spatial conditions are emphasised in order to point to the

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<sup>55</sup> If the notion of ‘backyard’ is maintained, then the ‘backyard’ of public agencies would stretch along the range of their political jurisdiction, such as counties, regions and other administrative units that are nothing else than political constructs. So Baltic 1 is not local for most public agencies. They are only affected by their range of authority.



personal affectedness. Wind farms are portrayed as being disruptive to the spatial conditions as well as to space-related practices, as reflected in the following quote.

“Here we have an area that is characterised by nature. Until today, we have been doing everything to avoid constructions that tower above the treetops. We placed the duty on ourselves to build only flat and mostly single-story buildings. All buildings are smaller than the treetops. This means, if you look at the area from afar, you won’t see any houses. But then 163m tall industrial monuments will stick out behind. That’s the incongruous thing.”  
*(Interview, protest group, Baltic 1, 2010)*

However, alternative suggestions have mostly been related to the prevention of the affectedness by moving the wind farm site away so that its externalities do not impact upon personal interests. But this also implies that affectedness is subjectively as well as discursively constructed, albeit differently. The affectedness of people constructed through the given planning systems and processes of public participation does not necessarily comply with their felt and perceived affectedness, which is reflected in the judicial indication not to allow the Prerow community to bring their objection forward in court due to non-affectedness, although the community felt variously affected (visibility, damage of horizon, environmental hazards etc.) and compiled hundreds of detailed deficiencies of the Baltic 1 project.

“We, as the community Ostseebad Prerow, have revealed 800 flaws, only with volunteers and honorary helpers. 800 flaws in this procedure, which were incorrect, which required rectifications and which required various amendments. Our intention to have these 800 flaws considered in front of court was dismissed by the judge in a provisional decision ... by saying ‘I don’t consider the flaws, I realise you are that far away, you are not affected’. After that, I withdrew the objection three days before the deadline, otherwise the community would have had a loss of 30.000-50.000€. So I withdrew, because we would have lost this case.”  
*(Interview, protest group, Germany, 2010)*

This quote also shows that the institutional construction of affectedness of the public is based on spatial references as the communities are regarded as being located too far away to be endangered. This conflicts with the understanding of the communities who regard their interests as being affected by the wind farm irrespective of its position.

Different versions of affectedness are also reflected in the divergent understanding of who is and who is not a stakeholder, conditioning the participation and the influence in the decision-making process. Thus the determination of affectedness is a fundamental part of the democratic process. All who are affected by a decision or development should have a say in its establishment through empowering affected stakeholders to participate in relevant decisions (BERNHARDT 2010). Employing

affectedness on “territorial boundaries tends to be undemocratic insofar as the impacts of decisions are not confined to territorial borders” (BERNHARDT 2010:8), political boundaries or administrative units. Therefore, it should be asked how and why stakeholders feel affected by a wind farm development and how affectedness is constructed in order to examine opposition instead of taking irrational NIMBY-motives and spatial determinants for granted.<sup>56</sup>

Affectedness only comes to light when particular interests, views and values are touched upon, disrupted or jeopardised by the siting and externalities of wind farms. The constructedness of affectedness is reflected in the space-related identity of the coastal communities and their space-related appropriations.<sup>57</sup> They either regard their regions as a tourism area or a rural traditional island both of which are inappropriate to host industrial wind farms. Opponents symbolically appropriate the wind farm region based on their proximity by presenting themselves as the host community, even if the turbines are meant to be placed several kilometres offshore and not within their community. They refer to the wind farm as ‘Tiree Array’ or as being ‘inshore’ in order to emphasise their affectedness, or regard the wind farm as “our contribution to the eco-balance” (Interview, tourism association, 2010). In order to make sense of the resistance to wind farms it is crucial to understand the self-referential affectedness of particular stakeholders.

That is why I argue to consider affectedness and its implications as essential condition that variously informs oppositional activities, instead of self-defeating NIMBY motives. Opponents in both countries oppose the construction sites of the proposed wind farm due to its vicinity to communities and its various consequences it might have for coastal residents and islanders depending on their range of interest-driven actions and structural constraints. Therefore, the conflicts over Argyll Array and Baltic 1 are grounded on interests of particular stakeholders that are affected or feared to be jeopardised by an offshore wind farm. So it is rather ‘stakeholder opposition’ that essentially triggers conflicts, the resistance of particular stakeholders based on their affectedness and the perceived disruptions of their space-related interests, rather than an undefined opposition of the adjacent public.

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<sup>56</sup> This implies to ask what conditions make people affected and concerned (visibility, personal values, hazards, economic interests, economic dependence on tourism, vulnerability etc.).

<sup>57</sup> The term appropriation refers to meaningful attachments and requisitions, subjective ascriptions of meaning and the meaningful construals and interpretations of objects (not in terms of private or commercial properties and possessions).

#### 6.4 Consideration of affectedness in planning

As mentioned, affectedness is constructed differently and certain actors may feel affected by offshore wind farms in the same way as if the wind farm may be built within the community. But their affectedness is also considered differently in the planning process, which especially frames a critique of the planning strategies in Germany. The German case study has revealed that planners and decision-makers do not consider communities as being particularly affected by offshore wind farms. This is why coastal communities regarded their affectedness as being taken insufficiently into account which is also expressed in limited participation possibilities, information and communication. But such a normative judgement regarding local communities as rather not concerned in the first place also opens the way for accusing them of holding unfounded backyard motives. If communities protest despite their alleged unaffectedness it is easy to criticise them for being irrational as their rationales to protest are regarded as unfounded. This complies with the account that NIMBY accusations are often produced by planners, representatives from the industry and government in order to devalue protests against facility siting as either emotional and irrelevant or selfish and parochial (BOHOLM & LÖFSTEDT 2004:xv). However, this leads to the question of how affectedness is constructed in the planning and licensing processes.

The communities in Germany construct their affectedness by reference to the legal term ‘protection of human beings’ (Schutzgut Mensch)<sup>58</sup>, which refers to various and indirect impacts on humans, as reflected in the quote below. Such a rather vague and indistinct term can refer to economic, social, political and even basic human rights that are adversely affected. But this vagueness is also in line with the uncertainty of definite impacts on coastal residents and communities:

“The ‘protection of human beings’ is what the community of Prerow is concerned about and is interested in. And person A has correctly explained that the construction of an offshore wind farm is much more complex than the facility shows itself. There are many subtle consequences to be considered, which the communities would have presented and discussed here. In this context, it would be advisable to think about how the ‘protected good human being’ is eventually dealt with and how adverse effects could be compensated. [...] How do experts deal with the fact that the protected public good cannot be considered

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<sup>58</sup> “Protected good human being” is the verbatim translation of ‘Schutzgut Mensch’. This term is usually used in connection with EIA which summarises the assessments of likely impacts on the livelihood and quality of life of human beings which should not be impaired as they present a legally protected good.

in the LBP.<sup>59</sup> That's why it's inquired in this and that direction or about this and that agency: It's not possible that communities are disregarded, if such a facility is really built, and the community will not only be disadvantaged in terms of the landscape, but also because of the impacts that may occur through the alteration of the natural conditions and the increase of dangers associated with the potential frequency of collisions." (Statement by founder of protest group at public hearing during licensing process) (STAUN 2005:157)

The uncertainty about definite impacts on coastal communities is also acknowledged by involved authorities when talking about 'affected communities' without addressing forms of affectedness in detail. They assume that only insignificant impacts and negligible impairments on communal interests, such as tourism, visual and landscape concerns, are expected (MABL-MV 2005a). Due to the uncertainty related to onshore impacts, it is challenging to quantify likely socio-economic impacts in the first place. In contrast, Marine Scotland seems therefore to draw their decision on the number of representations and complaints related to each site. But this gives also rise to the assumption that the decision to abandon those sites was made on the grounds of quantity and strength of resistance, in addition to the factual arguments raised:

"Yeah, there were over 200 representations which were objections to these sites, for each site in the Solway Firth and Kintyre. That is a hell of a lot. It is difficult to ignore that. And that was the difference from the sites elsewhere." (*Interview Marine Scotland. 2011*)

The prominence of the quantity of objections has been criticised by other opponents as inadequate and unfair, especially from Tiree, since the island has a much smaller population and has thus a less powerful voice and produced a much smaller number of protest statements in the consultation process.

As already mentioned, the prevalent issue in Germany is the inadequate consideration of the affectedness of coastal communities in the planning process, due to the lack of a legal obligation to do so:

"The offshore area is not municipalised and does not belong to any municipality. There is no need for an agreement. The communities only had the possibility to write an objection, a formal participation, because there is no municipal territory. This issue that those areas are not municipalised, that the community does not have any say there, was the bone of contention. You have the area right in front of your eyes, the coastal waters. You look at it every day and just because it does not belong to the municipal territory, you are not formally consulted as a public agency. And that was their thorn in the eye. They felt a bit excluded. They were literally put on a level with an 'everybody-objector', this certainly hurts. For example, if a coastal community says, I don't have more rights than an objector who comes in from Dresden, Magdeburg or from anywhere and who writes their objections on a postcard. That's a problem of equality." (*Interview, licensing authority Baltic 1, 2010*)

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<sup>59</sup> Accompanying landscape conservation plan (Landschaftspflegerischer Begleitplan, LBP)

Coastal communities in Germany are legally considered as non-affected, since the offshore area does not belong to their municipality and wind farms are built far away from the coast<sup>60</sup>. If an infrastructure project was proposed within their municipal area the community would be able to reject or downsize the development (Interview, planning agency, 2011). But the legal non-affectedness of communities, as reflected in the judicial estimation, impairs their participation and the consideration of their assessments. This corresponds with the conventional understanding of democratic theory in which a citizen's participation is generally bound to a territorially defined polity (BARNETT & BRIDGE 2013). To put it in another way, territorial demarcation becomes normatively significant insofar as actors who are affected may not gain the right to effectively participate in the decision-making process because of their territorial location. But when considering 'affected interests' "the right to participate comes from one's having an interest that can be expected to be affected by the particular collective action in question" (SHAPIRO 1999:38). Thus, employing the perspective of affectedness also provides different insights into the problem of public participation.

According to the quote above communities are not treated the same as experts from public agencies whose interests may be similarly affected. This again points to an institutionally constructed division and unequal consideration of the affectedness of stakeholders' interests. The affectedness of the public is not equated with the affectedness of public agencies. The (non)-affectedness of the public is defined by territorial determinants, whereas the affectedness of public agencies and experts is specified by affected interests, competences, expertise or the administrative purview of authorities. Such a definitional dichotomy between territorialised non-affectedness of the public and rational knowledge of experts dismisses local opponents, depoliticises their activism and reduces their attitudes to NIMBYism. This also implies, somehow, that coastal communities are meant to object only because of their proximity to the wind farm site. In that sense, the public is meant to be unaffected by the particular features and details of the wind turbines, as stated in the following quote:

"That's a legal problem, which could be solved in another way in the future; I don't know. Such conflicts should already be tried to be mitigated in the spatial planning procedure. What a community spouts off does only play a minor role in the later licensing process because they are somehow affected in extremely rare cases only." (*Interview, licensing authority Baltic 1, 2010*)

Such an understanding implies that visibility of the wind farm from the coast is no legally relevant criterion. But the case studies have shown that visibility often gains

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<sup>60</sup> According to the Federal Control of Pollution Act (BImSchG), it is determinative where facilities are placed and not where impacts are ascertained (GÄRTNER 2006:24).

importance and is mostly foregrounded by opponents from tourism and environmental organisations to justify further impacts (see tourism conflict next chapter). Yet the affectedness through visibility of Baltic 1 is deemed negligible in the spatial planning evaluation:

“The facility-related and operational impacts of the wind farm that are relevant to the protected good human being consist in the modification of the landscape through the turbines. According to the visual impact analysis and in compliance with particular conditions, there are no incompatible visual impairments expected.” (*MABL-MV 2005a:33*)

In contrast, the affectedness of communities by offshore wind farms seems to be better institutionalised in the Scottish planning framework. Communities are, at least, formally considered as equal actors in the planning process and their interests and concerns need to be taken into account in order to achieve best outcomes possible. Communities are not just informed about the planned development, but they are actively approached by the planning authorities and provided with the opportunity to participate in the steering process.

“We go out and try to meet these people from around the communities, who will be potentially affected by an offshore wind development and to ensure to take their views into account, to take them onboard, because you don’t know [...] You have to get this balance right and ascertain what the overall views of these sites are. And there is always a delicate balance, and places like Tiree, the Argyll Array site, which has to be taken forward in a partnership approach with the community to try to find a way forward with the developer and the community.” (*Interview, Marine Scotland, 2011*)

“The main concerns are, if you live near these areas for developments close to the shore, how it will affect my way of life. [...] The view from some of the communities which say, this will affect my life and my business, my way of life, then we have to take that onboard the same way as technical points and feed that in.” (*Interview, Marine Scotland, 2011*)

The difference is that it is taken for granted that an adjacent community can also be affected by an offshore wind farm, even if impacts are uncertain. Consulting communities and their views serves to overcome this uncertainty, to ascertain their affectedness and to find a joint way to bring the wind farm forward. Communities are conceded the right to have a say in the planning process and to influence the final result. But the scope of affectedness of individuals and communities seems to be primarily demarcated by spatial determinants as well, even if the concerns, views and interests of affected people are later used to ascertain potential impacts.<sup>61</sup>

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<sup>61</sup> Again, the sufficient consideration of communities’ concerns are justified in the abolishment of other wind farm plans due to immense protests: “So from that point of view, consultation is extremely important and as it was demonstrated in the southwest of Scotland, Wigtown Bay, Solway Firth, and Kintyre, there were significant levels of public concern about these sites. And Scottish Ministers decided, it would be best if these do not progress; on high levels of public concern, the potential of

In summary, the consequences of an offshore wind farm for communities should not be assessed by means of spatial determinism and territorialised affectedness. Public agencies are also consulted due to their expertise, interests and affectedness, and not because of their alleged spatial proximity to the wind farm. However, the fundamental question relates to the practical limitations of affectedness in terms of appropriate criteria to be used to define the scope and meaning of affectedness and affected people. This involves definitional questions about material, interest-related, subjective or personal affectedness as well as about democracy. A fruitful starting point for taking account of affectedness could be examining the vulnerability of a community with regard to specific risks emanating from the wind farm.<sup>62</sup> However, this fundamentally implies an alternative way to define the scope of affected communities that goes beyond the narrow jurisdictional classification and that encapsulates communities by means of various societal interests and self-identifications (LESBIREL 2011).

### **6.5 Affectedness and the role of spatial structures**

The fundamental underlying issue that combines the siting of renewables, space and affectedness is the re-appearance of the energy producing sector. The production of energy and its local environmental and social impacts have been “largely ‘out of sight, out of mind’” (WARREN & MCFADYEN 2010:210). Large parts of the population live spatially separated from the centralised sites of energy production, such as coal and nuclear power plants. This spatial remoteness has also led to a psychological distance between people and energy production (DEVINE-WRIGHT 2005b). But the growing number of decentralised renewables, such as wind farms, has shifted the perception from post-industrial landscapes back towards landscapes of energy production. These landscapes “undergo tremendous mutations under the expected transition to low carbon energy, economy and society” (NADAI & VAN DER HORST 2010a:144). And the mere appearance of wind farms provokes resistance, as

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adverse social and economic impacts and some environmental impacts.” (*Interview, Marine Scotland 2011*)

<sup>62</sup> But simply predicating affectedness on causality might turn out to be incoherent (BARNETT & BRIDGE 2013), as effects and impacts of a wind farm are, to some extent, indefinite and uncertain, which makes it difficult to clearly pinpoint affected interests and stakeholders. BARNETT & BRIDGE (2013:1032) suggest a pragmatist understanding of what they call ‘transactional space’ to conceive participation. A transactional understanding of space rejects any *a priori* determination of spatial entities for democratic participation and focuses on “the situation and problems out of which democratic energies arise” and then pays attention to ‘spaces’ that are constructed in the process.

their features and externalities are supposed to encroach on particular ecological, social and economic conditions at a certain place.

This is why planning processes are directed to identify suitable places for wind farms by looking at the various space-related uses of the offshore area in the first instance. This implies a comparative character to the planning approach as different places are conceived to be more or less suitable to accommodate wind farms. So the Scottish and German planning approaches somehow focus on the (in)-appropriateness of particular locations. But the opposition on Tiree and on the Fischland-Darß-Zingst peninsula has shown that opponents rather only hold a geographical partiality towards their places and charge them with certain meanings to emphasise the inappropriateness of their places, instead of comparing them with other more appropriate places (DRENTZEN 2010). Opponents challenge the suitability of certain places to accommodate wind farms which principally turns the conflicts over wind farms into conflicts over contested 'spaces'.

Both case studies have also shown that spatial references are the major factor to determine affected communities, be it the legal and spatial exclusion of the German communities due to distance to the Baltic 1 or be it the proximity of the Tiree community that makes authorities to take potential impacts into consideration. As explained in the previous section, decision-makers and planners in Germany seem to construct affectedness in two different ways. Public agencies are supposed to be affected because of their jurisdiction, interests and expertise, regardless of their location. In contrast, the public and communities are expected to object because of their proximity to and the visibility of the wind farm, without questioning their interests and concerns.<sup>63</sup> Thus, institutionalised affectedness comprises two different measures, both of which contain a normative appropriation of spatial conditions; a territorial (non)-affectedness of coastal communities as the wind farm is not situated in their municipality; and the affectedness of certain public agencies due to their scope of competences and authority that spans over a politically delineated area in which the offshore wind farm is situated. The general problem is that conflicts and feared impacts transcend space, but democratic measures to address conflicts are bound in and linked to space, i.e. to territorial boundaries.

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<sup>63</sup> On the one hand, communities are considered to be basically unaffected because of their territorial distance to the wind farm and on the other hand they are accused to oppose merely because of their proximity to the wind farm at the same time.



But opponents also appropriate the offshore space by emphasising the significance of the seascape for their economic needs and claim their right to the offshore space. Those appropriations of the offshore space are accompanied by symbolisations and emotional distortions of the spatial conditions which are described as unspoilt and unindustrialised, flat and rural, unique and traditional to assert the inadequacy of the wind farm.

Spatial structures play a role in the Scottish planning strategies insofar as the proximity of a community to an offshore wind farm is regarded as the potential cause for impacts on space-related human interests. The creation of energy landscapes is based on a relational idea of space consisting of the relation and efficiencies of certain objects to each other as well as a geographical dispersion of externalities of an offshore wind farm. So, spatial structures become only relevant through their perception by embodied people insofar as the location of the corpus of people and its positioning to the wind farm is co-decisive for their experiencing and perception (WERLEN 1997, 2005). Hence, “the corporeality of the actor, in the context of specific subjective socio-cultural and material conditions” (WERLEN 2005:49) can be seen as a driving force behind affectedness. People’s space-related interests in addition to their experienced spatial relation between their location and the wind turbines make them affected. The perception of practices related to the surrounding spatial conditions also becomes part of one’s identity and, thus, so constructed spaces can be seen as social expressions of identity (VIS 2009:40). This is exemplified in the visibility of the wind farm grounded on a relational conception of space through which the experienced and perceived spatial positioning of the beholder and the wind farm is feared to somehow affect space-related interests, values and practices. This will be elucidated in the following chapter on tourism conflicts, which will show that a meaningful and flourishing tourism industry is inextricably linked with a particular construction of the spatial conditions.

In conclusion, even though there is an “increased spatial separation” (HAGGETT 2008:302) between local people and offshore developments, this does not mean that people are less affected, since it is not only the spatial conditions, such as proximity or distance, that determine the affectedness of people. Therefore, NIMBY portrayals must be rejected, too.

## **CHAPTER SEVEN: THE COUNTER-DISDISCOURSE I — Tourism vs. Offshore Wind Farms**

### **7.1 Introduction**

Unlike other space-related conflicts over offshore wind farms that are directly related to spatial clashes of different interests and uses within the coastal waters, offshore wind farms also conflict with interests emanating from areas onshore. Onshore externalities of offshore wind farms proved to be the key concern of the public in both case studies. As initially described, evidence from Scotland and Germany shows that wind farms are argued to be disruptive and detrimental to the tourism industry at adjacent onshore locations and therefore endanger the economic existence of communities. Although there is obviously an increased spatial separation between communities and offshore developments, it would be too simplistic to assume that coastal communities are not or less affected by offshore turbines (HAGGETT 2008b, 2010; WOLSINK 2010). This is because the strength and direction of immediate and indirect effects emanating from large-scale offshore wind farms are, to a certain degree, unknown, and negative landscape impacts do not cease at the coastline (DEVINE-WRIGHT & HOWES 2010). The following sections will explore the ambiguous relationship between offshore wind farms and tourism by explaining how local opponents constitute this counter-discourse and how they rationalise and justify uncertain impacts on tourism. It will be concluded that tourism as an economic use of the seascape provides security for coastal communities and therefore competes with other land uses such as offshore wind farming.

### **7.2 Tourism and wind farms: An ambiguous relationship**

It is incontestable that many rural coastal areas increasingly rely on tourism as the manufacturing and agriculture sectors become less important. The continuous growth of tourism and related branches of the service-providing sector, such as health spa business, has compensated the losses of jobs in other industries (BYZIO et al. 2005). This structural change has especially been taking place at the coast of the Baltic Sea in Mecklenburg-Vorpommern during the post-reunification years in Germany, which moved from an agrarian-oriented area with a national tourism industry concentrated on the islands of Rügen and Usedom and the peninsula Fischland-Darß-Zingst to an area dominated by tourism. Similarly, the Inner Hebrides including Tiree are characterised by missing industries and the reliance of jobs in the administrative service sector (schools, administrative bodies, transport), tourism and agriculture.

Given the fact that the seaside and beaches have always been popular destinations of mass tourism (URRY 2002), the emergence of offshore wind power seems to evoke a fundamental visual change of the seaside and may thus intensify concerns about impacts on the tourism industry. Visually unchanged coastal areas are supposed to have preserved a certain distinctiveness and authenticity of true nature, in comparison to those seaside resorts which have become centres for tourist consumption of entertainment, sports and leisure that are no longer distinctive to many other places in post-Fordist times (URRY 2002:36). Hence, the siting of wind farms puts novel pressure on tourism landscapes and evokes resistance, resting upon the common comprehension that a successful tourism industry is inevitably associated with the natural and landscape-aesthetic value of a place (BYZIO et al. 2005; MACLELLAN 1998). This argumentation is reflected in the following quotes:

“In particular, the offshore wind farm Baltic 1 has undisputedly negative effects on tourism, especially as it directly lies in the field of vision of the summery sunset.” (*Consultation response, community Zingst 2005:12*).

“The latter (tourism association of Rügen) especially fears potential visual damage of the landscape and scenery and resulting economic losses.” (*Consultation response, district Rügen, 2005:2*)

Opponents are therefore concerned about the potential of wind farms to alter and spoil the appearance of the coast and to make it less attractive for tourists and visitors. A substantial decrease of tourists would result in a decline in revenues from tourism and would threaten the economic basis of individuals as well as coastal communities. Despite these concerns from the public, in both Germany and Scotland, the understanding of the relationship between offshore wind farms and tourism is ambivalent at most. The Scottish Government and the respective approval agency in Germany draw their decisions and directions on surveys which do not indicate any severe tourism impacts (BENKENSTEIN et al. 2003; TSG 2008b; VISITSCOTLAND 2012).

Particularly in Scotland, the tourism conflict involves a vast debate between two national discourses. Here, the preservation and expansion of a flourishing tourism economy meets the generation of an economy based on renewables which has recently culminated in a months-long national enquiry into the achievability of renewables targets initiated by the Scottish Government in 2012. This enquiry also explicitly focused on clashing interests between the siting of wind farms and impacts

on tourism. The enquiry concluded that “while some strongly held localised and anecdotal opinion exists’, there has been ‘no empirical evidence which demonstrates that the tourism industry in Scotland will be adversely affected by [...] particularly onshore and offshore wind” (EETC 2012:55-56). But in the same document it is stated that “given the importance of this issue, the Committee recommends that VisitScotland and the Scottish Government continue to gather, and take account of, evidence from visitors to Scotland” (EETC 2012:8), which carries some uncertainty.

The contradiction and uncertainty between evidence and fears has also impressively been stated by a member of the Scottish Tourism Alliance during the inquiry into the renewable energy targets.

“There is little evidence. Much of the argument so far has been on the emotional side. Lots of folk have a view on wind farms and renewable energy, but there is little research-based data on tourism. [...] there is no empirical evidence, so people rely on the emotional arguments and say that tourists will stop coming in droves because of wind farms – we will hear [Donald] Trump talk about that on 25 April.” (*EETC Inquiry minutes, 18<sup>th</sup> April 2012; 2012:1284*)<sup>64</sup>

Although this quote does not explicitly address offshore wind farms, it becomes clear that the reasoning of tourism impacts is supposed to emerge from subjective fears and emotions, just because there is no knowledge about actual impacts. People who raise such concerns and constitute this conflict line are even accused to be irrational NIMBYs, as there is no evidence for negative effects on tourism. So this quote demonstrates again that NIMBY accusations are even present in everyday politics (see previous chapter on affectedness).

However, the lack of empirical evidence for detrimental tourism effects, as stated in the quote, complies with results of the few studies that have been concerned with the interdependency of tourism and wind farms. The lessons from previous research fundamentally confirm the gap between the perceived, expected and feared impacts

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<sup>64</sup> As mentioned in this quote, the interference of the American tycoon Donald Trump in Scottish renewable energy politics has additionally fuelled the tourism conflict line over offshore wind farms. Donald Trump’s appearance arises from the plan to build an offshore wind farm off Aberdeen coast and the simultaneous building of a world-class golf resort by the Trump Organisation at this coastal area in close proximity to the wind farm. Donald Trump’s interference in Scottish renewable energy politics does not only include symbolic practices, such as media appearances. Reports also refer to massive financial support for CATS (Communities Against Wind Turbines Scotland). After Scottish Ministers had approved the wind farm off Aberdeen in March 2013 Mr Trump announced legal actions against this decision.

on tourism and a lack of empirical evidence from actual studies, which makes the alleged tourism conflict even more controversial.

Logically, a comparison of changes in numbers of tourists before and after the construction of a wind farm is the only sound indicator to measure impacts on tourism that may likewise have noticeable economic repercussions. That is why the few studies which have explicitly focused on the tourism effects of offshore wind farms attempt to quantify tourist attitudes towards wind farms. Thus, these rare studies (LILLEY et al. 2010; WESTERBERG et al. 2013) are mostly founded on quantitative tourist surveys and predominantly concentrate on ascertaining visitor attitudes towards a coastal area in which an offshore wind farm is planned. Those studies made use of a behavioural perspective directed towards the ability of visitors and tourists to decide between visiting a place or staying away because of a wind farm. But even if tourists may perceive wind farms as disruptive to a certain place, this does not necessarily mean that they would also stay away from that place. Hence, the attitudes and perceptions of tourists do not give clear evidence for any traceable and provable effects on the tourism industries. In other words, a decrease of 2% in tourist numbers due to a wind farm would not necessarily result in a 2% decrease of the tourism economy (LILLEY et al. 2010).

However, studies on tourism impacts have revealed a discrepancy between the degree of concern of local residents about negative impacts and the actual attitudes and expected tourist behaviour. The majority of surveys indicated that only a minor percentage of visitors may change their behaviour and would not visit a seaside exposed to an offshore wind farm (FIRESTONE et al. 2009), although concerns regarding damages to the tourism economy and the local livelihood subsist (DEVINE-WRIGHT 2009a). Others (LILLEY et al. 2010) come to rather ambivalent results and do not rule out the possibility of negative effects on tourist levels.

A completely contrary perspective is presented by SHAMSUZZOHA et al. (2012), who do not assume that visitors might be put off by wind turbines and rather highlight the potential of onshore wind turbines in a rural Scottish context to attract visitors. In doing so, they interestingly discuss whether the increased numbers of visitors are perceived as disturbing or beneficial by the local population. This assumption complies with the claim that onshore wind farms could well act as a tourist attraction (FRANTÁL & KUNC 2011), even if a smaller number of tourists would hold negative

attitudes towards wind farms. When differentiating the scale, wind farms may have only negligible effects on tourism on national level in Scotland, whereas impacts at the local level are likely to be more significant (REDDINGTON et al. 2010).

There are basically three key lessons from these existing studies: 1) the visibility of offshore wind farms seems to matter for tourism; 2) there has been no substantial evidence for wind farms to have negative effects on the local tourist economy or current results are at least ambivalent; 3) there seems to be a gap between the results of surveys and expert knowledge, on the one hand, and the rationalities of local residents who are concerned about a decline in tourism, on the other hand.

Coastal residents reiterate concerns about tourism despite surveys which do not reflect any clear evidence for the correlation of offshore wind farms and a decline in tourism. Most studies seem to take the visual impact of wind farms as the impetus for negative effects on tourism for granted, but show highly ambivalent results. Although visual impacts seem to be the most apparent argument, it does not provide satisfactory insights into the tourism concerns raised by local residents, and some other lines of reasoning may be causally invoked to establish the 'tourism vs. offshore wind farm conflict', such as environmental impacts. Accordingly, VAN DER HORST & VERMEYLEN (2011:467) also "warned against uncritical acceptance of claims of 'visual impacts' and 'landscape impacts' as appropriate arguments against renewable energy projects" as long as their underlying framings and assumptions are not sufficiently considered. But, since there are only a few wind farms in coastal waters, planners and decision-makers can only draw on surveys conducted prior to the building of a wind farm, which mostly do not indicate any adverse effects on tourist levels. Thus, the typical conflict involves expert assessments and evaluations that show low risks or impacts and local opponents insisting on their concerns and challenging the assessments (FISCHER 2005). The complex problem of the divergence between the perception of the magnitude of risks in the assessments by experts and the provoked strong public concerns can be understood as the social amplification of risk (KASPERSON et al. 2005). The 'reluctance to accept such risk analyses' (FISCHER 2005:127) and the hostility towards expert assessments compelled institutional actors to dismiss opponents to be irrational (WOLSINK 2012). But the salient disagreement and ambiguity between expert evaluations and the views of local opponents has regularly been examined by means of what MARGOLIS (1996) frames as ideologies, trust and rival rationalities. Even though MARGOLIS (1996:47)

doubts that any of the three approaches can sufficiently contribute to explanations of divergent views of experts and lay people, rival rationalities can give some indication of how opponents rationalise and justify an impact on tourism and a decline of revenues from the local tourism economy. The questions are therefore why coastal communities incessantly express fears and how they rationalise impacts on the tourism industry, although surveys predominantly suggest the opposite?

### **7.3 The tourism conflict: Underlying storylines**

The gap between the lack of empirical evidence and persistent concerns about tourism impacts begs the question of how the correlation between wind farms and tourism that dominates the debates and planning process in both case studies is substantiated. In order to grasp the emergence of this conflict line it is necessary to look at the different storylines opponents draw on to reason the existence of a conflict with tourism and to examine how they make sense of the problem. Five basic lines of reasoning that reflect the logic behind the claim could be inferred from the case studies of Baltic I and Argyll Array offshore wind farms. All storylines try to deliver some (more or less tangible) common arguments of why tourists are scared off by the offshore wind farm. Those arguments do not just provide a basis for justification, but also construct ‘logical (reasonable, rational) reasons why audience members should define a particular condition as troublesome’ (LOSEKE 2008:27). In this respect it is not just sufficient to simply look at what reasons are quoted, but also where the alleged knowledge comes from and how stakeholders create meanings to convince respective audiences while negotiating the likely effects onshore. The aim, following BURNINGHAM (2000), is not to judge what a legitimate argument is or what is right or wrong, but to reveal the arguments and the reasonings underlying the claims in order to understand how opponents constitute and make sense of the tourism conflict.

#### **7.3.1 Visual impact storyline**

When justifying the negative effects on tourism the visual impact of offshore wind farms is the most common, but also a less tangible reason local opponents invoke. This argument basically refers to the visibility of offshore wind farms and the deterrent effect it would have on tourists, and emphasises the lack of harmony of the wind turbines with surrounding spatial conditions. The storyline is embedded in the notion that the natural beauty of an area is intrinsic to tourism, since only the beauty and uniqueness of a place makes it worthwhile to visit. Although such meaningful

interpretations are subjectively ascribed by the beholder, many arguments highlight the uniqueness and particularity of Tiree and the Baltic Sea coast in order to point towards their significance for tourism:

“To the community of Prerow as a focus area of tourism, the landscape and scenery is the formative factor and thus decisive for the [tourist] acceptance of the village.” (*Consultation response, Prerow community, 2005*)

“The unspoilt view at the sea and thus into pure nature is a trademark of our business.” (*Consultation response, public, Baltic 1, 2005*)

These examples elucidate that the beauty of a place is inextricably associated with its naturalness and nativeness, and that landscape and visual conditions are imperative for tourism. The ascribed significance to naturalness of a place implies that only a place with unchanged spatial and physical conditions is supposed to be appealing to visitors. The unspoilt view at a pristine nature is exploited for economic purposes which can no longer be legitimised if a wind farm is being built nearby. So, unchanged and visually unspoilt conditions present the antithesis to human modifications of the landscape through the siting of artificial obstacles. Offshore wind turbines are regarded as such an obstacle, as a material manifestation of a socially imposed transformation, which annihilates the ‘natural’ beauty of the coast. Both areas, Tiree and the Darß peninsula, are similarly romanticised as places that have been able to preserve their historically grown appearance and naturally given conditions. The siting of wind turbines is equated with an industrialisation that is visually incompatible with a non-industrial landscape and rusticity of both areas. Particular points of interest for tourists, viewpoints or sights, are meant to be devalued when the scenery is dominated by the turbines. The value of the landscape for tourism becomes void even if wind farms are only visible from a larger distance at the horizon, as they epitomize moving objects. In particular, the flashing signal lights on the turbines are perceived as a disturbing factor for the landscape:

“... the perception of the wind farm as nightly play of lights of a rather engineered world does not fit into this gorgeous landscape of this region.” (*Consultation response, Tourism Association, Baltic 1, 2005*)

As any visual intrusion is based on subjective grounds, people who have been living on Tiree or the Darß-peninsula for decades may experience the visual change of the landscape more pervasively than tourists who visit these places occasionally. Residents feel disturbed by the visual intrusion of turbines in the sea and so tourists are meant to sense the same interference. So, personal attachment to the place and



sense of place play a major role in shaping the perception of the wind farms and the visual change of the scenery, although those subjective qualities cannot easily be quantified. Coastal landscapes have a flat and horizontal character which makes them particularly vulnerable to the intrusion of vertical objects. The mere visibility of wind turbines is literally constructed as the thorn in the flesh of tourists, which is supposed to make them avoid coastal areas that are filled with turbines. This leads to the second storyline regarding disruptions of the local character.

### **7.3.2 Disruption of local character and identity**

Both areas adjacent to the wind farm sites in the two case studies are constructed by the opponents as unindustrialised and primarily rural. The pure presence of the wind farm is regarded as inappropriate for the specific local settings, as it would destroy the cultural character and identity attached to the area. The wind farm is meant to have an adverse effect on the community, resulting in diverse cultural changes which make the conditions less attractive for tourists. The reasoning underlying this storyline of the disruption of the local character differs between the case studies. Similar to the visual disruption, opponents to Baltic 1 emphasise the physical change of the landscape through the turbines, whereas antagonists on Tiree raise concerns about the potential socio-structural modification of the island:

“This is an alien use for sure, which has considerable effects on the scenery and as a consequence harms the region’s tourism. Those are the specific effects on the region, the communities, but also on the owners of respective businesses.” (*Consultation response, Tourism Association, Germany, 2005*)

“To impose on the island the role of construction and maintenance base for a 400 turbine installation would radically alter the existing island life and culture. There is increasing anxiety in Tiree about the island’s future in the light of Scottish Power’s pronouncements. Uncertainty is proving harmful to the cohesion of the community.” (*Consultation response, public #66, 2010*)

Offshore wind farms are regarded as an imposition that does not fit into the seascape scenery and its tourist uses. This also implies that tourism is conceived as the priority use and somehow excludes the co-existence of both uses.

“With Fischland-Darß-Zingst, we have a region that is entrenched in tourism, with tourist and accommodation businesses based on tourism, and a region that has especially an unique status due to its unspoilt nature and unobstructed landscape; apart from the actual protected goods of fauna and flora in the national park directly situated in the region.” (*Consultation response, Tourism Association Fischland-Darß-Zingst, 2005:11*)

“We are a tourist region. A tourist region makes money by distancing itself from other regions and by highlighting its nature. There are small urban oases enclosed in this nature,

like Prerow. Apart from that, we come up with an undisrupted horizontal landscape. [...] We make every effort to keep everything flat and to attune to nature and they do everything to destroy the horizontal picture.” (*Interview, protest group Baltic 1, 2010*)

The latter argument draws on the understanding of horizontal coastal scenery shaped by an open horizon over the sea, which has been preserved over decades by implicit agreements on the avoidance of constructions that would tower above trees as natural height limits. Wind turbines are meant to stick out of the seascape and would ruin the natural conditions of the coastal area, which can only hide human artefacts when they are kept flat. Interestingly, this reasoning has been confirmed in the Spatial Development Programme, which states that ‘issues like the visual impairment through the creation of vertical structures at the horizon have to be carefully handled, as free, unspoilt nature is an indispensable economic factor for many employment-intensive areas’ (MABL-MV 2005b:68). So the knowledge of this oppositional storyline seems to reproduce the exclusion criteria stated in the policy paper. Moreover, the villages of Prerow and Zingst have been awarded the prestigious status of a seaside resort and people fear that this status will be revoked due to the modification of the traditional qualities of the landscape. Such damage to the image is feared to result in a decline of attractiveness for tourists<sup>65</sup> and might even have direct economic repercussions through the cessation of the spa tax.

Unlike the concerns regarding Baltic 1, residents on Tiree fear that the operation and maintenance of Argyll Array would impinge on inadequate structures and resources of the island. The yet uncertain construction and maintenance approach may entail far-reaching structural adjustments to accommodate required facilities on Tiree:

“The life they [people on Tiree] enjoy of beauty, tranquillity, privacy and nature will be gone forever, along with the livelihood that so many depend upon from tourism and serving their community.” (*Consultation response, public #164, 2010*)

“In fact, this small and beautiful island would become a man-made outpost on a significant industrial scale, a service base for operating 550 turbines, a huge platform for the second largest existing or planned off-shore wind farm in the UK. By its nature, this industrial operation cannot be reduced in scale or impact, except by moving it from the island.” (*Consultation response, public #28, 2010*)

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<sup>65</sup> This argument resembles the one referring to the construction of Waldschlösschen Bridge in Dresden, which led to the delisting of the Dresden Elbe Valley from UNESCO World Heritage in 2009. This controversy has been fiercely debated in Germany and may have informed this argument against the Baltic 1 wind farm too.

This concern has also been generally confirmed with regard to large offshore wind farms developments at the Scottish west coast:

“These are small remote communities and there are concerns that the influx of a large number of construction workers and ongoing maintenance workers will impact adversely on the culture and lifestyles of these communities and that local public services will be unable to cope with the increased demand.” (*Consultation response, public #192, 2010*)

Inadequate infrastructural conditions necessitate structural changes in order to cope with the increasing demand arising from many incomers on the island. A large number of workers cannot easily be absorbed by the present infrastructures and public services on the island. The construction of new buildings and transport facilities is feared to change the traditional image of the island and to jeopardise its traditional rural life and the cultural heritage. In addition, those construction workers are possibly “mostly foreigners” as they are supposed to have the required “skills to build a wind farm of that dimension” (Interview, No Tiree Array, 2011). The permanent residence of a large number of incomers would result in rapid cultural changes compared to a gradual change that has happened over centuries. Those structural changes would also include a step away from its rusticity and tourist assets and make it less desirable for tourists.

Although the wind farm might bring new jobs, the traditional businesses, like tourism, fishing and crofting, are feared to be outweighed by the incoming wind industry or may even perish completely. However, this reasoning also implies that workers and tourists are conceived contrarily. Tourists are supposed to assimilate with the life on Tiree, just because they particularly look for this tranquil and rural lifestyle, close to a pristine nature away from urban life. In contrast, workers and incomers are regarded to bring the hectic, urban lifestyle to Tiree along with all its negative effects, like criminality, anonymity and impersonality (Interview, protest group, Argyll Array, 2011). The claims behind this storyline say that both wind farms do not fit into the local contexts and disrupt the uniqueness of the places making them less appealing for residents and visitors.

### **7.3.3 ‘Construction’ of tourists and visitors**

As implied in the first two storylines, the narratives of opponents involve a particular interpretation of the traits of tourists. Opponents create and instrumentalise a certain image of tourists to rationalise the assertion that offshore wind farms would scare off tourists once they cannot satisfy their desires anymore. This storyline serves to depict

an image of tourists which complements the mutually dependent relation of nature and tourism:

“Tourism is an increasingly important factor in the economic survival of Tiree's indigenous community, and its future depends on continuing to attract the island's regular and returning visitors. They come for four main reasons: the island's peace and tranquillity; its exceptional land- and seascapes; its wild-life; and the culture and environment of a small and beautiful Hebridean island.” (*Consultation response, public #28, 2010*).

“A visitor of a national park assumes to discover an unobstructed landscape. In these places, one makes sure not to diminish the typical appeal through too high design heights etc. The beaches are also kept free of technical facilities and this is what every visitor expects and the visitor experiences these facilities entirely different, as if looking at the roadstead in Warnemünde.” (*Statement at public hearing regarding Baltic 1, 2005*)

Both quotes illustrate that tourists are supposed to hold specific expectations and goals when visiting a certain area. The tourist is thus constituted as the subject, as the focal point of the tourism conflict. Only the behaviour and choice of the tourist will either have a positive or negative impact on the tourist area, but this choice is feared to be influenced by the presence of the wind farm:

‘The ‘impartial average beholder’ is not the tourist who specifically chooses the region in order to enjoy the beauty of the unspoilt nature. [...] Every tourist is receptive to nature and therefore seeks this consistently unspoilt nature of the region and the wind farm appears all the more devastating if it can clearly be spotted from every point.’ (*Consultation response, Tourism Association, Germany 2005*)

Tourists constructed in this way become restricted by their own expectations and desires. They usually visit an area because of its meaningful spatial conditions. Therefore they cannot be regarded as unbiased and impartial towards the ascribed particularities of an area, such as unspoilt nature or flat coastal landscape. They discern the coastal landscape more consciously and seek to satisfy certain purposes when leaving their everyday life and place. In comparison to an unbiased person, tourists are thought to be sensitive to and especially receptive to particular features of a landscape and are meant to commune with nature. They appear as contemplative observers who desire the aesthetics of a natural coastal landscape and who seek to reverse their everyday alienation from nature. So tourist spaces are always somehow excluded from the everyday world and manifest something particular, the otherness, outside of everyday life (WÖHLER 2011). The ‘natural’ coast becomes the object of the tourist gaze (URRY 2002). The desires and needs of the tourists are constructed in a way that perfectly chimes with the ascribed assets of the landscape. In other words, the consumption side (tourists) and the production side (nature, landscape) of the tourist gaze are socially constructed as a reciprocally influenced balance. But once a

wind farm as an industrial object is placed into this landscape the conditions tourists usually look for become voided. A wind farm would destabilise this balance and would displace the ‘otherness’ visitors look for. The feared adverse effect on tourism is thus reasoned by the assertion that tourists do not find the sought conditions anymore and would therefore stay away from the area.

Such a feature-related image of a coastal area is also advertised through various marketing strategies to attract visitors seeking for those assets. So the building of a wind farm is also thought to counteract those ambitions on which the tourism industry is grounded. In summary, tourists are biased and look for the otherness of a particular area, which detaches them from their everyday life and place. But this otherness and uniqueness of the coastal zone will be devastated by the siting of an industrial facility and the tourists do not find the desired features anymore, which is eventually supposed to make them stay away from the areas.

#### **7.3.4 Disturbance of recreational activities**

Offshore wind farms are not just believed to impair the value of the seascape, but also the recreational value and leisure activities at the coast. Another storyline emphasising the negative impact on tourism concerns spatial clashes with tourist activities. It expresses this conflict line by emphasising the potential of the offshore wind industry for physical and spatial disturbance and limitation of recreational activities, such as water sports like sailing and surfing, which all may make the tourist areas less worthwhile to visit. This argument has predominantly been applied by those who refer to impacts on Tiree and the Scottish west coast:

“It does mean we are against the Argyll Array so close to the shore and its massive effect on tourism. And the majority of tourism here is water sport-based. People don’t come here to see the site of Tiree. They come here to be at the beach. This is our biggest economic driver here.” (*Interview, No Tiree Array Action Group, 2011*)

“Recreational boating and marine tourism currently use many harbours, ports and slipways round our coast and have a potential to use more. [...] and any terrestrial resource has also the potential to be used as part of the development of offshore wind energy. [...] It is the case that the Scottish coast, and particularly the west coast, is identified as being one of the world’s premier destinations for sailing. This may alter if sensitive areas have developments in close proximity to them.” (*Consultation response, Scottish Boating Alliance 2010*)

Water sport-based tourism is a key source of income for the people on Tiree. The island annually hosts the International Wave Classic, a renowned windsurfing event that attracts a lot of visitors. Most of tourist life is supposed to happen at the beaches, which are exposed to the wind farm at the west coast of the island. If the

implementation of water-based activities is somehow restricted by the Argyll Array wind farm due to the influence on the wave quality or the limited access to the waters of the wind farm site, a decline of the revenue from tourism is likely to happen.

Moreover, this storyline also refers to a clash with the use of onshore facilities, as indicated by the Boating Association. In particular, many harbours are not large enough to accommodate boats of visitors as well as increasing numbers of vessels required for the construction and maintenance of offshore wind farms. This argument is again grounded on the uncertainty of the applied schemes to construct and maintain the wind farm. A potential expansion of the harbour is not desired by the residents on Tiree as this would change the rural and tranquil face of the island and a new “harbour is not going to be our harbour, it is their harbour, they would give us 25m<sup>2</sup> in the corner” (Interview, No Tiree Array, 2010). The residents of Tiree seem to be happy with the existing facilities and resources they have been using over decades and do not want rapid changes that would impair the recreational activities and attractiveness of the island. In short, this claim predicates that visitors and residents are literally displaced by the offshore wind industry and its spatial demand.

### **7.3.5 Environmental impact storyline**

A fifth storyline refers to detrimental effects on the environment from the wind farm and the subsequent impact on tourism. Driving away or killing seabirds and the risk of ship accidents leading to oil spill are deemed to have consequences for the tourism industry. In particular, the Baltic 1 wind farm is defined as an artificial obstacle that may cause hazards making the area less attractive for tourism. Birds are a crucial element of the Baltic Sea region that entices a large number of visitors and are thus conceived as a tourist attraction in their own right:

“... and also from the perspective of the seaside resort Zingst, as the annual rest of cranes is not just a tourist attraction, but also a signature feature of the region for a healthy and untouched nature.” (*Consultation response, Baltic 1, 2005*).

“... migratory birds are part of what citizens on the peninsula Fischland-Darß-Zingst exceptionally moves and partly pervades the peninsula, at least in autumn, with tourist life.” (*Statement at public hearing, Baltic 1, 2005*)

Opponents produce a direct argumentative correlation between the presence of birds and the attractiveness of the area for tourism. A decline in birds is supposed to have a direct impact on tourist numbers, especially in the low season. This argument also reproduces the ‘construction of tourists’-storyline saying that visitors, such as bird

watchers, come only because of a specific interest and will stay away due to a potential displacement of wildlife.

The second argument underpinning the environmental impact storyline points to risks emanating from ship collisions with wind turbines. Particularly during the planning process of Baltic 1, an extensive debate arose because of the proximity of the wind farm site to the very busy shipping route 'Kadetrinne'. This debate was exacerbated by diverging interpretations and perceptions of risks originating from the shipping route.

“Tourism brings that amount of money, million or billions. Now you have an oil catastrophe because of a collision and you have this damage and such damage to our image, which entails a generally negative outcome.” (*Interview, Tourism Association, Baltic 1, 2010*).

People fear ship accidents and oils spills that pollute the beaches for years. Such an ecological disaster would completely devastate the coast and annihilate the significance for tourism. Oil pollution would render the area useless for tourism, ruin the existence of the tourism space and cease the economic foundation of the region. This hazard is also acknowledged by the government of Mecklenburg-Vorpommern, stating that “a tanker accident might have disastrous economic consequences for the federal country with its strong focus on tourism” (MABL-MV 2005b:67). Nevertheless, the regional planning evaluation concludes that the relatively large distance between the wind farm and the shipping route makes collisions barely likely. In contrast, the concerns of opponents are framed by prior experiences of accidents, even though not involving offshore turbines, as well as by knowledge about former incidents and ship safety in the Baltic Sea.

#### **7.4 Claims-making, uncertainties and existential fears**

Although several storylines are invoked to explain why offshore wind farms may have an impact on tourism and cause a decline in the regional-economic profits from the tourism industry, there has been no clear real-life evidence substantiating this concern. An adverse effect on the tourism industry could only be ascertained by means of tourist numbers and flow of guests. But unavailable empirical evidence means all the described storylines seem to lack credibility at present and constitute nothing other than claims. Likewise, decision-makers can only base their claims on meta-studies of experiences from few existing international wind farms, neglecting the particularities of the respective local contexts. In this context, the Ministry of

Economic Development Mecklenburg-Vorpommern funded a study about the “Effects of offshore wind farms on tourist supply and demand structures in Mecklenburg-Vorpommern” which was conducted by the Baltic Institute of Marketing, Transport and Tourism at the University of Rostock. But this study was conceptualised as a meta-study which made use of results of all available studies and tried to apply them to the regional context of Mecklenburg-Vorpommern (BENKENSTEIN et al. 2003:2). So this study does not explicitly assess the region-specific situation on the Darß-Zingst peninsula and the communities of Prerow and Zingst from which most concerns about tourism impacts evolved. This issue has been criticised by local opponents in order to dismiss this study as not relevant to make any useful contribution to the problem and to gain any viable knowledge, which also reflects distrust of scientific assurances.

The lack of site-specific knowledge has also been criticised by the Tiree action group, which stated that “there is still no definite research into tourist impact arising from the offshore wind farm development, other than ‘scraps’ from Denmark” (No Tiree Array website 2012). Despite the resurgent concerns of local residents and obscurities in tourism assessments, the planning authority for Baltic 1 “comes to the conclusion that economic losses in the tourism sector due to the erection and operation of the wind farm are, in all likelihood, not expected” (MABL-MV 2005a:51). So, opponents rather stress the significance and uniqueness of the local context to which results of studies that draw on other geographical areas cannot be meaningfully applied.

The tourism conflict is therefore not shaped by contested knowledge, as there is no knowledge on which the claims are grounded. From a discourse analytical perspective it can be concluded that only these diverging claims constitute the conflict (HAGGETT & FUTAK-CAMPBELL 2011). Claims made about wind farms are not just a way of gaining access to conflicts, “they are the site of conflicts” (HAGGETT & TOKE 2006:112). Since neither opponents nor decision-makers are able to underpin their positions with evidence, all claims are embedded in uncertainty to some extent. This uncertainty is grounded on a lack of knowledge about the outcomes and future conditions once the wind farms are built. RENN (2008:71) frames this uncertainty arising from a basic lack of knowledge as ‘epistemic uncertainty’.



In the midst of this epistemic uncertainty, and as stated by GEE (2010) visual impacts have persisted throughout the planning procedures of offshore wind farms in the North Sea, and as a consequence have been spread through newspapers and other media. So, the media seem to play a key role in reproducing and maintaining the tourism conflict and in creating alleged, but hard-hitting knowledge, as exemplified in the following figure:



Figure 13: “Crazy! Giant wind turbines in front of Timmendorf Beach” “Would you still come here for your holidays?” Bild-Zeitung, 19<sup>th</sup> December 2003: (taken from Gee 2010:168 and amended)

A contrasting view on the tourism conflict has also been spread through the media. Different newspapers in Germany have also tried to propagate the understanding that offshore wind farms do not have a negative impact on tourism and may even represent a tourist attraction. Claims about this draw on experiences from Denmark as reflected in the regional press (Ostsee-Zeitung, 11.0.2004) as well as specialist journals (LÖNKER 2004). More recently and specifically, the mayor of the town of Zingst explained in the national press that “the wind farm [Baltic 1] has no effect on the flow of guests” (Focus, 30.04.2012) after the wind farm had been in place for about a year. This utterance reflects some kind of certainty as no changes in tourism could be determined.

However, since both regions exposed to the wind farm sites are heavily dependent on the revenues from tourism, the concerns and fears of local residents become more comprehensible. Tourism is regarded as a traditional, constant but fragile source of income. But wind turbines are perceived to endanger this source of income and thus the economic existence of the communities, as reflected in the storylines. Such existential fears together with the existing uncertainty of impacts are then translated into a risk which is deemed too high for the wind farm projects to go ahead. The motive of many local residents to oppose the wind farm is grounded on a loss of security, as the wind farm imposes a risk to their fragile economic basis. Jobs in the tourism industry provide a sustainable source of income and outweigh indeterminate local benefits from offshore wind farms. This was especially raised by some residents of the coastal communities in Germany, who created their self-identity by stressing personal achievements of their post-socialist lives that would be sacrificed if the wind farm was built:

“Our family has been living in Prerow for many generations. After the German Reunification, under huge entrepreneurial risks and with all available means, we achieved to found a restaurant, located at . . . ., with a direct view to the sea, as well as several shops in town. We regard this as a substantial contribution to the Upturn East and to the boom in tourism of this region which has started in the last 15 years and has continuously progressed since”. We regard the construction of the wind turbines as a significant intervention in the unspoilt nature of our region. We fear that the acceptance of the project outlined in the assessments will fail to appear. No one will be affected more severely than my wife and me, as we are directly affected by the project because of our location (direct view).” (Consultation response, public #1, 2005:1-2).

Local residents are more risk-averse than planners and decision-makers as they have more at stake. The motive of opponents is the uncertain negative economic effect that the wind farms might induce. Local people and residents see themselves as victims and losers of such economic consequences, even though this loser perspective is based on uncertainty.

The uncertainties informing the risks imposed upon the tourism industry can be considered as ‘manufactured uncertainties’, as their causes and side-effects are socially produced. These risks ‘result from the societal, usually technology-based pursuit of highly valued goals and successes in the process of industrial modernisation; in short they are manufactured uncertainties’ (BECK & KROPP 2007:602). Hence, manufactured uncertainties ‘are distinguished by the fact that they are dependent on human decisions, created by society’ (BECK 2009:293), which is also reflected in the opponents’ claim not to permit the wind farms. In their opinion, the siting of offshore wind farms as a manufactured uncertainty can be prevented,

which would lead to the avoidance of uncertainties for and endangerment of the tourism industry. That is why potential compensation measures are widely seen as irrelevant to tourist issues by opponents. The resisting storylines also include an implicit moral claim not to change present conditions and not to jeopardise a vulnerable tourist economy by imposing unknown risks on communities.

However, a fundamental constituent of this conflict is the transfer of an individually felt disruption to visitors and tourists. Local people take for granted that tourists regard the wind turbines as disturbing as they do. So, a further ambiguity emerges from the gap between the perceived disturbance because of offshore wind farms and the actual behaviour to stay absent from an area. Even if tourists may feel disturbed by the wind farm, this does not necessarily mean that they do not visit or return to a place. There might be other assets or amenities attracting specific visitors that prevail over any nuisances caused by the wind turbines. This leads to the argument that the tourism claims against offshore wind farms include another attitude-behaviour gap that cannot simply be assessed by surveys, which rather represents a snapshot in time. But claims regarding impacts on tourism do not consider this gap and take a direct relationship between the nuisance through wind farms and the absence of tourists for granted.

### **7.5 Consideration of tourism aspects in planning**

The different storylines have shown that local stakeholders basically stress the spatial incompatibility of a flourishing tourism economy and offshore wind farms. In contradiction to this claim, at least in Germany, policy-makers and decision-makers reckon that both industries are reconcilable with each other, as there is no substantial evidence for a negative influence. The results of the inquiry of the Scottish Government do not assume that wind farms would cause a decline in tourism either, even if they point to the significance of the individual case.<sup>66</sup>

But given the uncertainty and lack of knowledge about tourism impacts it is not just important to discuss whether tourism is affected by the offshore wind farm, but what should be done *if* tourism in the area is affected. Addressing such an issue would mean that planning and licensing authorities relinquish their doctrinally negating and

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<sup>66</sup> That is the reason why Wigtown Bay offshore wind farm and the extension of the Solway Firth offshore wind farm have officially been dropped by the Scottish Government. Unpredictable consequences for the local economy therefore seem to be considered by the decision-makers in Scotland.

persuading mentality (see BARRY & ELLIS 2011) and concede the matter of uncertainty related to the effects of offshore wind farms. But this might also have placated the opponents and provided an opportunity to discuss potential tourism impacts beyond the gridlocked discussion of whether or not impacts on the local tourism industry occur and whether wind farms are compatible with the tourism industry, as it was reflected in the Scottish Government inquiry. Regardless of the governmental agencies' denial of impacts on tourism in Germany, discussing the question 'what if tourism is somehow affected' would also require opponents to leave their viewpoint of a categorical rejection of the wind farm due to perceived risks for the tourism industry. Both standpoints were rather diametrically opposed to each other in Germany. Although the conflict line with tourism in the Tiree case study is not as distinct as in Germany, potential impacts on tourism have been treated as uncertain by the opponents and the Community Development Trust on Tiree while predominantly focussing on particular conditions associated with the (still to be specified) approach of constructing and maintaining the wind farm. However, one session of the parliamentary inquiry (25<sup>th</sup> April 2012) into renewables targets particularly focused on tourism, although the discussion mostly concentrated on the compatibility of onshore wind farms, apart from the offshore wind farm planned off Aberdeenshire inciting Donald Trump's intervention.

But because of the lack of evidence of impacts on tourism, Scottish authorities also follow the objective 'truth' instead of sufficiently considering subjective and emotional concerns of local people. Due to their technocratic character, the planning procedures in both countries are incapable to adequately evaluate and integrate the "real issues" (WOLSINK 2010:202) at stake into the decision-making process, in particular the subjective, emotional and landscape-related concerns. It seems to be less problematic to dismiss emotions as irrational and to take more rational, technical and quantifiable criteria into account. So the planning practices lead to an implicit distinction between values and facts, whereas the latter one seems to inform decision-making more strongly. Counter-arguments happen to be less powerful in the final decision-making process as the decision relies on scientific knowledge and rational facts instead of uncertain allegations. Similarly, the norms of the consultation processes are rather defined to favour scientific and technical knowledge over claimed rationales (see sections 9.3. and 9.4. for more detail).

Even if the tourism conflict may partially consist of emotional factors, it is nevertheless not helpful to dismiss emotionally invoked issues as irrelevant during the planning process. Downplaying emotion-laden arguments or portraying them as myths would impair a more fruitful and constructive dialogue and would make opponents reckon the decision-making process as even more unfair and unbalanced (see chapter six on affectedness).

However, the practical side of considering tourism impacts and emotive arguments remains unsolved. Although potential visual impacts on and the transformation of landscape are considered and discussed in the regional planning procedure, their immediate economic repercussions seem to be less profoundly assessed. The correlation between visual damages of the land- and seascape and tourism effects is not sufficiently re-enacted in the assessments of the planning and decision-making process, especially not in Germany. Although the *Regional Planning Assessment*<sup>67</sup> emphasises that “much importance is ascribed to the coastal landscape of Mecklenburg-Vorpommern, especially to the region of Fischland-Darß-Zingst [...] which is also relevant to the tourism industry” (MABL-MV 2005a:43), it is concluded that the “impairment of the landscape is altogether tolerable” (MABL-MV 2005a:43). Therefore the planning agency “assumes that a considerable decline in guest numbers can be eliminated in all likelihood, due to the relatively small alteration of the scenery” (MABL-MV 2005a:51). However, this estimation explicitly draws on the meta-study conducted by the University of Rostock only, which does not address the uncertainty in terms of risks in the way they are perceived by local people.

As opponents regard potential impacts on tourism as an economic risk, a risk analysis might be helpful to consider the uncertain but possible consequences of the wind farm. A particular risk appraisal (RENN 2008) which takes uncertain effects on tourism into account might address people’s concerns more effectively, instead of excluding them on grounds of lacking factual evidence. A risk appraisal should have two stages. “First, natural and technical scientists use their skills to produce the best estimate of the physical harm that a risk source may induce [...]; second, social scientists and economists identify and analyse the issues that individuals or society as a whole link with certain risks” (RENN 2008:67). But the Baltic 1 assessments of

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<sup>67</sup> Conducted and produced by the Ministry of Labour, Building and State Development Mecklenburg-Vorpommern (planning authority).

tourism impacts seem to stop at the first stage and do not evaluate the risk perception and further implications of the direct and indirect consequences, which reflect the social amplification of risks. Such a step would also provide a chance to integrate the vulnerability of the communities into the assessments. Shifting the perspective of assessments from impacts towards the vulnerability or resilience of communities can be a valuable way to gain additional understanding of the risks instead of taking solely potential impacts of wind farms as the origin of assessments into account.

### **7.6 Physical-material structures in the tourism conflict**

When claiming that the natural beauty and authenticity of a place is disrupted by offshore wind farms, opponents have to illustrate their understanding of an authentic, natural, unmodified and beauty place. In order to substantiate most of the storylines potential spatial transformations of a *status quo* have to be demarcated. In particular, the portrayals of the terms nature and landscape are laden with a particular meaning that pervades the conflict situation. Such an understanding is related to a social construction or appropriation of the spatial conditions of an area.

The so constructed authentic ‘nature’ becomes a symbolical and physical resource on which conflicting practices are grounded. Nature and landscape with particular features, as a resource for tourism, becomes significant in the conflict context. Nature in the conflict is constituted as something that differs from human everyday life. Nature is considered as something that is opposite to human beings, as something that is not influenced and altered by humans. As soon as the natural conditions are changed or shaped by human activities it is no longer seen as untouched nature. The siting of offshore wind farms as an artefact of the industrial world would be a human intervention into nature.

“To place a wind farm as an industrial monument in a protected area ordained by nature is scandalous and inexplicable.” (*Interview, protest group, Baltic 1, 2010*)

“If I look at the whole area, everything is kept flat, everything is nature and all of a sudden there are industrial monuments. And this is what annoys and bothers me.” (*Interview, protest group, Baltic 1, 2010*)

Only a pristine and unchanged environment is seen as nature. With regard to the tourism conflict the relationship between nature and humans is mostly conceptualised by opponents as being contrasting to each other and creates a dichotomy between human civilisation and nature. Nature is regarded as pristine and primordial, whereas everyday life of humans is regarded as a part of the industrial

and urban world in which people are captured. Tourism seems to be a way to bridge the gap between nature and humans by providing people with opportunity to temporarily leave their everyday life in the industrial world and to commune with, to appreciate and to return to the pristine environment which has been lost in their postmodern and frantic life.

In more theoretical terms, Tiree is constructed as what Foucault frames as *heterotopia*, “which is something like counter-sites, a kind of effectively enacted utopia in which real sites, all other real sites that can be found within the culture, are simultaneously represented, contested, and inverted” (FOUCAULT 1986:24). So Tiree becomes a ‘real’ utopia, an inverted and contested space, as it is meant to have preserved a traditional rural lifestyle which is appealing to people who look for a life in tranquillity and reclusiveness, outlying from an urban society and its undesirable implications. Tiree can therefore be regarded as a haven and place of refuge for some incomers who want to leave their previous lives behind. From the perspective of the wind farm opponents Tiree can even be regarded as a *heterotopia of deviation* (FOUCAULT 1986) through which the negative effects of urban life and society (e.g. traffic, crime, alienation, stress) are compensated and in which the ‘others’ are voluntarily concentrated. However, this spatial construction does not necessarily apply to native inhabitants of Tiree who have been living there for generations and who do not perceive the place as a heterotopia, and who may rather demystify the island as a real place with real-life issues. Hence, the wind farm might either be seen as a threat to the heterotopia of a tranquil and peaceful island or as just another mundane problem residents of the island have to face. This again reflects the two different place identities that seem to divide the Tiree residents.

The physical-material conditions at the Baltic Sea coast are constructed as an unspoilt nature as the key resource for tourism. The physical conditions become only meaningful insofar as they are conceived by actors and strategically incorporated into the conflict situation. They become a condition for conflicting practices. Meaningfully charged concepts of nature and landscape are converted into an argument with which actors try to underpin their stances. In doing so, many actors have often regarded the natural beauty of the Scottish landscape and nature, especially the coastal areas, as a national asset of Scotland. This asset will be negated if the landscapes and seascapes are dominated by wind farms. Similarly, the coastal area of the Baltic Sea is constructed as a successful tourist region which is at the

forefront to bring economic benefits to the whole federal country of Mecklenburg-Vorpommern. Both areas would lose their functionality to attract tourists and to acquire revenues if the wind farms went ahead. That is how physical conditions are purposefully incorporated into the conflict situation as an argument to prevent the building of the wind farms.

Physical-material conditions are not only the external ‘object’ on which the conflicting interests are grounded, constructed understandings of nature and landscape including particular features for tourism also become the ‘subject’. The subjectification of ‘pristine nature’ is based on the fact that not only its material features become relevant in the conflict context, but rather its particular meanings and purports that are constituted through the desires and concerns of actors.

### **7.7 Summary – a resurgent discourse of economic decline**

The tourism conflict ultimately demonstrates that the low carbon energy transition is experienced by local actors as a unprecedented transformation of spatial conditions which also extends to places and communities that were previously unaffected by energy production (NADAÏ & VAN DER HORST 2010a). The different storylines substantiating the tourism conflict have shown that potential impacts on the tourism industry are not only based on emotions and claims. Arguments rather reflect different scenarios of how tourism could be negatively affected. It is a lack of knowledge and uncertainty about the outcomes and the construction processes that lead to claims-making on both sides of the conflict. Likewise, in Germany, decision- and policy-makers simply draw on the certainty reflected by other case studies which do not testify any adverse economic effects of wind farms, but without considering particularities of the respective local context. This is what constitutes the gap between alleged lack of evidence of tourism impacts and fears and thus induces the tourism conflict. But there is no clear evidence for the non-occurrence of site-specific impacts either.

Revenues from tourism reflect economic security for coastal communities, and wind farms provoke risks to this economic foundation and evoke existential fears due to unknown place-specific consequences. It is the structural conditions, cultural and economic circumstances that cause a social amplification of risks in relation to the wind farms. So, it is a discourse of economic decline that informs the persistence of the tourism conflict over offshore wind farms which is likewise shaped by different



storylines that make sense of how wind farms intervene with tourism. These storylines basically rest upon the notion that the experiences of otherness are still crucial for holidays, leisure and recreation and that the tourist value of a region is highly dependent on its scenic, aesthetic and natural value. When claiming that the natural beauty and authenticity of a place is disrupted by offshore wind farms, opponents have to invoke a particular understanding of what an authentic, natural, unmodified and beauty place or area is. Thus, the tourism conflict is variously entangled with the social construction of physical and spatial conditions. Landscape as 'space' or better the symbolic and meaningful attachments to physical-material conditions become an element of social communication in the conflict context, insofar as they are strategically instrumentalised to enforce particular interests and to stress the incompatibility of others. Only an industrially unspoilt coastal landscape is meant to ensure a flourishing tourism economy. This particular socio-economic meaning of nature and landscape is reified as a good that can be consumed by tourists. A tourist-induced commodification and consumption of nature, heritage and culture (SHAW & WILLIAMS 2004) can thus be extended to spatial conditions whose consumption is mainly expressed by practices of sensory experiences and physical appropriations through tourist activities. Hence, the tourism conflict gives evidence for the assumption that not the wind farms are contested, but the seascapes that are meant to be changed by the siting of wind farms and its repercussions for the local economy. But since it is hardly possible to rule out real place-specific effects on tourism prior to any wind farm development, it is more appropriate to conceive tourism as an economic use of land- and seascape that competes with other space-related interests and which should also be incorporated as such in the planning process.

In more practical terms, the key question is rather how to turn different uncertain effects of offshore wind farms into positive outcomes. How can uncertainties and risks be addressed in the planning process to create a mutually convenient outcome instead of polarising claims and refusals? (see policy recommendations chapter 10) A starting point could be the practical incorporation of argumentative patterns and storylines of opponents in a deliberative planning process in order to scrutinise the reasoning of their concerns by either alleviating them argumentatively or using them to inform the ultimate decision and appearance of the wind farm. In that sense, the concerns that constitute the tourism conflict could be addressed by considering tourism-related arguments as legitimate interests and by weighing them against other

land uses. This would also imply a more pertinent consideration of indirect socio-economic impacts onshore as well as community values during the decision-making process.

**Table 7: Summary of tourism conflict**

<b>Hegemonic discourse</b>	<b>Counter-discourse</b>
<ul style="list-style-type: none"> <li>• no evidence about impacts on tourism</li> <li>• local concerns are emotional and irrational</li> </ul>	<ul style="list-style-type: none"> <li>• offshore wind farms cause adverse effects on coastal tourism and local economy</li> </ul>
<p><b>Oppositional storylines:</b></p> <ul style="list-style-type: none"> <li>• visual impacts on seascape → ‘natural beauty is intrinsic to tourism industry’</li> <li>• wind farms impede the recreational purpose of the coast and disrupt ‘unspoilt’ nature</li> <li>• tourists look for particular spatial conditions that are threatened by wind farms</li> <li>• wind farms impose environmental risks which impinge on tourism demand</li> <li>• wind farms modify the cultural and spatial characteristics of the tourism region</li> </ul>	
<p><b>Diagnosis:</b></p> <ul style="list-style-type: none"> <li>• tourism is economic use of land/seascape that competes with other space-related interests</li> <li>• tourism reflects economic security</li> <li>• wind farms evoke risks and existential fears due to unknown place-specific consequences</li> <li>• place-specific consequences are contested</li> </ul>	



## **CHAPTER EIGHT: THE COUNTER-DISOURSE II — Environmental Impacts and Inner-ecological Conflict**

### **8.1 Introduction**

One of the central incentives to move wind farms offshore is the avoidance of increasing environmental constraints onshore. But the anticipated prevention of environmental damages, such as the killing of birds and disturbance of habitats, remains unfulfilled and many impacts are shifted along with the wind farms. As described in the case studies, new conflicts encompass the disturbance of avian and marine wildlife, the destruction of the seascape and the seabed and novel risks to marine traffic. Hence, similar to onshore wind farms, offshore wind farms are very likely to cause a number of environmental impacts on the site at which they are placed. Another prevalent conflict line therefore includes the uncertainties of environmental impacts. This chapter serves to illuminate the second counter-discourse that challenges the siting of offshore wind farms by invoking environment-related storylines. These storylines will be summarised first, before the attention will turn towards constitutional aspects of the inner-ecological conflict. The chapter explores the discursive fracture that provokes the inner-ecological conflict and explains how powerful actors try to mitigate this conflict.

### **8.2 The environmental conflict – underlying storylines**

Obligatory environmental impact assessments are an integral part of planning procedures and guarantee an institutionalised and thorough consideration of potential environmental interferences of offshore wind farms in territorial waters. Those assessments are enshrined in the Federal Control of Pollution Act (Germany) and the Environmental Assessment Act (Scotland) to ensure that any relevant environmental effects are incorporated in the planning and decision-making process. Despite this institutional entrenchment of the examination of environmental impacts, both case studies have demonstrated that the problem-oriented method of coping with environmental conflicts is far from being straightforward and a series of issues have crystallised from the siting of Baltic 1 and Argyll Array. While particularly focusing on the inner-ecological conflict, key issues will be examined in this chapter. The so-called inner-ecological conflict fundamentally frames environmental disputes over offshore wind farms and allows the possibility to emphasise environmental and ecological arguments, either to support or to reject wind farm developments.

First, three environment-related storylines will be summarised, which have been recurrently invoked by opponents and critics constituting the antagonistic environmental position towards offshore wind farms. Secondly, the focus will then turn towards the facets of the inner-ecological conflict and it will be shown that not just environmental NGOs, but also planning authorities have to cope with the pitfalls of conflicting environmental interests. It will be further argued that the inner-ecological conflict is predominantly constituted by environmental ‘experts’ and merely reproduced and instrumentalised by the wider public, whereas advocating voices for renewables remain rather silent in the debates. The chapter will close by looking at the extent to which the planning regimes are capable of considering the uncertainties and risks of environmental impacts.

### **8.2.1 Intervention with wildlife**

Offshore wind farms are supposed to interfere with the habitats of various animals. Environmental concerns are particularly directed to the disturbance, displacement and killing of resting and foraging seabirds (MERCK 2006). Another environmental issue that appeared in both case studies is the effect on marine mammals and fish species.

Harbour Porpoises (*Phocoena phocoena*) in the Baltic Sea have often been stressed to be adversely affected by noise emissions during the construction works of Baltic 1. The suffered nuisance depends on the chosen piling methods as well as on the capability of the porpoises to tolerate noise emanating from ramming procedures; the latter of which is problematic to assess due to unknown thresholds measured in decibel. So, recommended thresholds of noise emissions and piling methods may still be too high for marine mammals, which could result in the abandonment of their habitat and their spatial displacement. Concerns about birds accrue from the spatial overlapping of resting areas and migration routes between Scandinavia and Continental Europe. The BUND views Baltic 1 as an artificial obstacle that blocks the migratory paths of birds. An additional problem emerges through currently planned wind farms in the Baltic Sea which may additionally contribute to a diminution of migratory paths. Such unconsidered cumulative effects may result in a modification of migratory patterns and a displacement of birds. In particular, resting Cranes (*Grus grus*) are widely considered to characterise the environmental quality of the area.

Wildlife concerns within the Argyll Array case study involve potential effects on Basking Sharks (*Cetorhinus maximus*) and Great Northern Divers (*Gavia immer*). But the disturbance of these animals has only become apparent through the results of initial assessments. Indeed, planners, developers and opponents have only lately turned their attentions to wildlife impacts. In particular, the opposition group NTA strategically deploys both species as crucial features of the intact nature of Tiree in order to emphasise the local environmental incompatibility of the wind farm. So, these natural objects, sharks and birds, can be seen as constructs reflecting the significance to those articulating them, rather than as coherent elements of a coherent nature (DEMERRITT 1998). The apparent real endangerment of these animals is an “artefact of scientific representation” (DEMERRITT 2005:189) and is distinguished in order to enunciate conflict-relevant concerns. Only the knowledge gained about a potential endangerment has resulted in an argumentative shift of particular priorities of opponents and developers, who now express concerns about disruptions of shark and bird habitats. This knowledge about potential wildlife has led to a reduction of the proposed site through the developers and a strategic realignment of opponents’ arguments.

### **8.2.2 Disruption of protected areas and habitats**

Environmental disruptions do not just include particular species that may be harmed or expelled by the presence of offshore wind turbines. Offshore wind farms are also feared to have direct and indirect impacts on nearby marine and coastal habitats and protected areas. Wind farms are seen as persistent industrial structures and their construction contradicts the purpose of nature conservation and reserves (ABBOTT 2010) and thus the pure proximity of wind farms to nature reserves is deemed unacceptable. Wind turbines in vicinity to protected areas do not fit into the natural and conserved landscape and may even interfere with the wildlife inhabiting these areas, which has been reiterated by opponents to Baltic 1 with reference to the Western Pomerania Lagoon Area National Park. There are two different aspects coming together: the “intrusion of an alien structure that threatens to destroy an iconic landscape” (WICKERSHAM 2004:343).

This is why areas of special interest protected under NATURA 2000 and the EU Habitats and Birds Directive are formally excluded from the construction of wind

farms. In Germany, developers are allowed to propose wind farms overlapping with protected areas, but these are exempted from feed-in tariff provisions under the EEG (German Renewable Energy Act) in order to ensure “that these areas remain free from wind developments” (MERCK 2006:23). A temporal mismatch in the designation of future protected areas and the precedent designation of suitable wind farm areas in Scottish waters may cause inconsistencies and contradictions in sea use management (Interview, JNCC, 2011). That is why opponents of Argyll Array hope for the waters around Tiree to be designated as a marine protected area, too. Similarly to Scotland, the un-coordinated site selection in the Baltic Sea by developers, in terms of staking out the best sites without adequate regulations (Interview, BUND, 2011), may lead to an impractical fragmentation of the offshore area with unforeseeable cumulative effects (see also Chapter Nine on planning conflicts).

### **8.2.3 Environmental hazards through ship collisions**

A common storyline against Baltic 1 underlined the increasing risk of potential ship collisions with wind turbines, which entail more momentous consequences for the local environment. The wind farm is regarded as an artificial obstacle that increases the already existing dangers of ship accidents emanating from the very narrow and highly frequented shipping route ‘Kadetrinne’. Although the shipping route is located a couple of kilometres west of the wind farm, concerns about ship collisions and subsequent oil catastrophes have pervaded the debates about Baltic 1. Since such risks are also addressed in previous studies (BIEHL & LEHMANN 2006), hazards through ship accidents have been treated as a considerable threat in the planning process. But as the question of ship collisions is a rather theoretical one, the risk assessment was based on numerical and technical grounds to quantify the likelihood of accidents. This is also reflected in the study by BIEHL & LEHMANN (2006), who focus on technical features, such as the piling and ship type, in order to analyse the scope and mitigation measures for potential accidents. But the wind farm cannot legally be seen as the interferer, as it does not bear the risks of ship collisions. The risk of ship collisions and oil spills emanates from the ship which hauls the hazardous goods (PESTKE 2008:189), which turns them into the hazard and not the wind farm. In contrast, a different understanding and perception of the existing risks made opponents criticise the alignment of the risk analysis. They were not solely interested in the assessed probabilities or frequency of ship accidents. They were rather concerned about the preventative measures to avoid accidents and the

mitigation measures to decrease the extent of environmental impacts in case of an emergency.

However, ship collisions impose another environmental threat not just for the marine environment, but also for coastal areas far away from the wind farm. Environmental impacts through oil or chemical leaks can have more far reaching consequences than the ones directly emanating from the physical interference of the wind turbines. Oil spills could devastate the coasts for many years which may have an adverse effect on further economic interests, such as the fishing and tourism industry. Thus, mitigation strategies perceived as insufficient and existing risks contributed to existential fears of coastal residents and made people oppose the wind farm by essentially stressing environment-related concerns. However, the coastal communities are not destined to exercise these ecological interests for the benefit of the public (PESTKE 2008:189), which denies its *locus standi*. The guarantee of communities as self-governing entities does not affiliate such rights to exercise ecological interests for the general public (PESTKE 2008:189).

### **8.3 Inner-ecological conflict between climate protection and nature conservation**

As the previous overviews have demonstrated, from an ecological perspective offshore wind energy is a double-edged matter. On the one hand, it is associated with optimistic expectations of the realisation of global climate protection, sustainable development and “an ecological advancement of the industrial society” (BYZIO et al. 2005:109). And on the other hand, offshore wind farms also engender ecological burdens due to their spatial demand and externalities that clash with traditional remits and objectives of nature conservation. Those burdens especially include interferences with the marine flora and fauna as well as the, previously reiterated, visual and aesthetic intrusion into the landscape. This contradictory phenomenon inherent in renewable energy facilities, especially wind farms, has been phrased as ‘Inner-ecological Conflict’ (BYZIO et al. 2005, MAUTZ 2010) as well as ‘Green on Green’ controversy (WARREN et al. 2005, YONK et al. 2013).

Although both terms basically refer to contradictory environmental domains, the idea of an inner-ecological conflict rather stresses more broadly the clash of an environmental goal and value conflict between nature conservation and climate protection within environmental movements, whereas the ‘Green on Green’ notion



points to the fact that “there are strong ‘green’ arguments on both sides of the debate” (WARREN et al. 2005:854). Environmental arguments can be used to legitimise oppositional courses of action. However, both terminological notions highlight that conflicts over renewables do not solely involve contradictory objectives between economy and ecology, which have often shaped the classic paradigm of environmental conflicts as approached by Political Ecology, but that a novel conflict dimension also involves diverging environmental objectives. Two identity-establishing principles of the environmental movement encounter each other, nature conservation<sup>68</sup> and climate protection. Both positions are embedded in a particular geographic scale. Interests in favour of wind energy are usually related to global aspects, whereas interests in nature conservation focus on a local or regional scale (WARREN et al. 2005). Moreover, the inner-ecological conflict also exhibits a temporal dimension, as immediate and direct local environmental impacts of wind farms are juxtaposed with long-term consequences of an unaddressed climate change (WARREN et al. 2005), leading to the fundamental issue of prioritising and evaluating environmental impacts. This implies that disputes over renewables are not just founded on clashing local and global environmental interests. The contested environment-related ideals about renewables, such as offshore wind farms, also comprise conflicts of values and goals. Contrary attitudinal values, objectives and priorities break the overarching discourse of the environmental movement and open up the division between nature conservation and climate protection (MAUTZ 2010; OHLHORST & SCHÖN 2010). Values and priorities are either ascribed to local nature conservation and landscape valuations or global climate protection, which frames attitudes towards wind farms, as reflected in the following quotes. The latter one is one of the very rare comments that clearly emphasise the need to respond to climate change.

“My personal opinion is that I don’t perceive wind turbines in the scenery as that bad. I would want such a thing in front of my doorstep rather than draining a wetland to place it there.” (*Interview, BUND, Germany, 2011*)

“While landscape is an important part of Scotland’s natural capital, supporting tourism and recreational industries, it should be at the front of everyone’s mind that our landscape is heavily modified, and that responding to climate change is a key issue for this decade. Landscape issues should not be given undue influence.” (*Consultation response, public #118, 2010*)

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<sup>68</sup> Here, nature conservation rather refers to protection from external influences and preservation of a certain condition, as opposed to active sustainable land management.

Given the fact that renewables are also anticipated to essentially contribute to societal and sustainable development, a novel nexus between ecological motives and economic interests becomes obvious, too (OHLHORST & SCHÖN 2010). Both sides of the inner-ecological conflict fought over at the local scale are rooted in the superordinate national and international level, which gets planning authorities in a predicament, as they have to implement the statutory provisions and policies from a higher level. On the one hand, climate protection and the reduction of carbon emissions should be prioritised, but on the other hand, obligatory “directives for the protection of biodiversity have been expedited at EU level” (OHLHORST 2009:189). So, the inner-ecological conflict pervades and finds expression on different scales.

Despite their potential local environmental impacts, offshore wind farms are widely conceived as an environmentally benign, sustainable and progressive technology, at least in comparison to conventional technologies of energy production. But as described, this is why the renewables discourse clashes with a conservation discourse framed by local environmental values and interests. When considering nature conservation as a type of land use management, two different scales of land use collide at a certain area. Wind farming can also be seen as a particular type of land use directed to macro-scale conservation by means of renewables policies (ABBOTT 2010). Hence, local scale and macro-scale conservation strategies collide and materialise at the local level. National urges to tackle climate change clash with national conservation strategies; international agreements to tackle climate change clash with international agreements to protect biodiversity (NATURA 2000, Habitats Directive etc.), both of which have to be implemented at the local level. Depending on their physical conditions and ascribed characteristics particular local sites are either meant to serve as appropriate locations for wind farms or are worth protecting from any intrusions. This is also reflected in the joint project between SNH, JNCC, Historic Scotland and SEPA to designate and advice Marine Scotland on Protected Marine Areas. So, the meaning of nature conservation in relation to wind farms is grounded on the values ascribed to a particular area or site.

In summary, the fundamental break in the discourse of an inner-ecological consensus can therefore be found in the question *where* and *how* offshore wind farms should be put in place (BYZIO et al. 2005). In order to resolve the conflict of interest and value between nature conservation and climate protection, wind farm decisions are usually “handled on a case-by-case basis” (BRUNS et al. 2011:282), which is reflected in

individual planning and licensing procedures. However, the inner-ecological conflict over offshore wind farms imposes an action-related dilemma on particular actors. The following sections are concerned with the question how the inner-ecological conflict is manifested and how the discursive break in environmental consensus is expressed at the local level while environmental impacts are negotiated in the planning process.

### **8.3.1 Inner-ecological conflict and environmental organisations**

Unlike governmental promoters, environmental organisations are “critical advocates” (BYZIO et al. 2005:118) of the offshore wind industry because of their emphasis of the necessity for equally considering environmental impacts instead of focussing on the benefits for the global environment only. As critical advocates their narratives do not repudiate the existence of an inner-ecological discrepancy within their goals, but they are also convinced that both interests can be reconciled with each other. The interest of environmental organisations in both countries is directed towards the ecological amalgamation of offshore wind farms and local environmental conditions. The climate change discourse is deemed to be a valuable possibility for a straightforward energy transition. But climate change is also seen as a double burden for the local environment, in terms of local impacts of wind turbines when addressing climate change and in terms of uncontrolled local effects of an unaddressed climate change. Therefore, relevant agencies in Scotland, such as the SNH and JNCC, aim to avoid and reduce impacts when offshore wind farms are sited, whereas the strategy of the BUND in Germany is to find a general environmentally benign and ecologically compatible way to put wind farms in place.

“I think this formulation ‘ecologically compatible’ in the positioning paper must be read as a compromise between the energy and nature protection working groups, because ‘ecologically compatible’ is rather, if I may use the word, a bit squishy. ‘Ecologically compatible’ is exactly what we don’t know yet; what is ecologically-compatible at a certain location? [...] This formulation leaves things open because we can’t say either what’s ‘ecologically compatible’ because we don’t know yet what is going to happen when I do this and that at a certain location.” (*Interview, BUND, 2011*)

Organisations in both countries are convinced that climate change-related goals and nature conservation can be progressed together and do not exclude each other.<sup>69</sup> The

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<sup>69</sup> The inner-ecological conflict also poses questions of credibility on environmental agencies and organisations, as the public may easily regard them as not credible when advocating renewables, opposing against conventional power plants and emphasising local impacts of renewables. This dilemma makes environmental organisations hesitant to litigate against offshore wind farms. (see also section on BUND in Chapter Four)

question is rather where those stakeholders detect the breaks constituting the inner-ecological conflict and how they reconcile both objectives. The inner-ecological conflict within environmental organisations is basically framed by the uncertainty about definite environmental impacts in certain places. This uncertainty originates from the lack of knowledge about cumulative environmental impacts, the time scale provided for environmental assessments in the planning process as well as the exploration of appropriate construction methods, as indicated in the following quotes:

“It does [depend on the specific site]. It depends on what environmental interests there are in particular locations and then again, the size and scale of the development. A lot of this is still open, that is why we are working together with the developer, seeing what is coming through from the survey work and we will be checking the assessments.” (*Interview SNH Perth, 2011*)

“Like I said, we have been looking for two years of monitoring work which isn’t very long at all. [...] Historically there has not been much research going on for the marine environment. Research is expensive; it is difficult environmental conditions to do this research; the government hasn’t funded it very well. So we just don’t have as much information about the marine environment as we’d like to have. And to think we would get it in two years is a bit ambitious.” (*Interview, SNH Perth, 2011*)

So, the *first* crucial determinant for environmental NGOs is the specific place *where* offshore wind farms should be built. The inner-ecological conflict is supposed to be avoided by finding the right place by means of gaining more knowledge about the marine ecosystems and its mechanisms in connection with wind turbines. Of course, the acquisition of more knowledge and findings from impact assessments do not guarantee the identification of most environmentally compatible places. The compatibility of wind farms in a certain environment depends on the site-specific conditions and interests. This entails the questions of what environmental interests occur in a particular location, and how these environment-related interests are constructed and determined. Incompatible interests are mostly determined by superordinate guidelines which classify endangered species and protected habitats on which wind turbines might have an impact. However, due to a lack of knowledge about the marine environment, the exact positions of those environmental goods can only be located and specified during preliminary assessments, as it has happened in the waters around Tiree. Consequently, the pre-given time frame for impact assessments is deemed crucial for making the right decisions and to identify the right place.

“I am slightly concerned about the speed of development and the timescales, you know, it is all very fast. [...] So onshore started all small and kind of worked up, whereas the scale of what is proposed offshore from the start is a bit concerning. And what we have been finding is that the work that has been done for Round 1 and 2, for various wind farm sites in England and Wales,

doesn't actually give us that much information. [...] So I think it is a bit concerning because we don't have this body of evidence to help us to come to a view or helping to form an advice for the government." (Interview, SNH Perth, 2011)

"Yes, this was probably politically desired, for whatever reasons; they wanted to have an operating wind farm in addition to Alpha Ventus<sup>70</sup>. [...] You can quarrel if that's a good location. We don't think that's a very ideal location. It is always the question how fast something was approved, if it was desired. I think wind farms in the 12nm-zone would not be approved anymore; they would all go in the EEZ today." (Interview, BUND, 2011)

Thus, *secondly*, an adequate time frame to monitor, assess and consider potential impacts is crucial to gauge the consequences of a wind farm in a certain location. There is even less knowledge about the effects of offshore wind farms on the marine environment than about the impacts of onshore wind farms, which constrains well-informed decision-making. The concern about insufficient knowledge about the marine environment due to imbalanced and too short-sighted monitoring and assessments appears to be the same in Scotland and Germany. Environmental agencies in both countries consider the monitoring process as too short to make sound and significant statements about impacts. This is mostly because there has not been much research into the marine ecosystem before the offshore boom, on which assessments could rely, and because of the unknown efficiencies of turbines at sea. Prolonged monitoring and far-reaching assessments are intended to provide more reliable knowledge about the marine environment to make more informed decisions on the site selection and construction methods. The choice of different construction methods also depends on the physical and environmental conditions, and most suitable methods may vary according to the setting. Therefore environmental organisations demand the research and development (R&D) of various piling methods in order to reduce damage to the seabed and noise emissions for marine mammals in the best possible way, from which later projects can benefit:

"Testing new construction methods for the first offshore wind farms would be equivalent to a pilot phase. This should be enshrined as a restraint. [...] You are working together with university X, which developed this method and you are going to test it. So they won't get any trouble during the construction. Either the test has failed or you realise, we have discovered a good method, which can be used for the next wind farm straight away." (Interview, BUND, 2011)

So, *thirdly*, from the perspective of environmental organisations, the inner-ecological conflict can be avoided or minimised by applying least damaging construction methods.

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<sup>70</sup> Alpha Ventus has been the first German offshore wind farm of 12 turbines located in the EEZ, but is seen as a research project rather than a commercial wind farm.

These uncertain spatial, structural and technical circumstances make the general support of offshore wind farms conditional when it comes to projects at the local level. Reservations depend on the specific environmental conditions and the results of impact assessments, which should be used as exclusion criteria to avert wind farms in a particular place, if necessary. Therefore, the inner-ecological conflict between nature conservation and climate protection can only be reconciled through a thorough weighing and exhaustive assessments of impacts. Offshore wind farms are only justified in marine areas where permanent environmental damages and additional effects can be definitely ruled out. Otherwise, projects should not go ahead and should be dismissed on grounds of environmental assessments, if sufficient compensation and mitigation is not guaranteed either.

“And then one must look for compensations, and if this is not feasible, then it has to be considered whether the site is really necessary. So the site must be removed because it is too difficult to compensate.” (*Interview, BUND, 2011*)

In summary, the break in environmental consensus about offshore wind farms contains three essential aspects questioning the siting at the local level. These break lines comprise: appropriate locations *where* offshore wind farms can be built; *how* a wind farm is built in terms of appropriate construction methods; both of which depend on appropriate time scales for impact assessments (*when*) to identify best locations and methods to place offshore wind farms. Thus, environmental organisations strive for reconciling both sides of the inner-ecological conflict by finding best solutions and approaches to where, how and when wind farms should be sited; as summarised in the following quote:

“It is not about the prevention of wind energy, but it is about an optimisation of the procedure, an optimisation of the identification of sites, and not prevention.” (*Interview, BUND, 2011*)

However, the inner-ecological conflict is also expressed in the external image and exercise of power of environmental organisations. This becomes especially evident through the constitution of the SNH, which is, as a government agent and advisor, trapped between the implementation of European legislation towards the protection of nature and giving advice on the implementation of offshore wind farm to the Scottish Government. In contrast, the inner-ecological conflict in Germany is less institutionalised through relevant environmental agencies in Germany, as they do not have any obligations towards the government or decision-makers and act rather independently. The BUND can rather be labelled as traditional conservationists that form a ‘green’ discourse coalition with the John Muir Trust and Friends of the Earth.

They have to face and deal with the two positions of global climate change and nature protection to find an internal strategy and compromise, which they define as the ecological compatibility of offshore wind farms in a particular location. But therefore the inner-ecological conflict appears at another node in the German regulatory framework, which will be the subject of the next section.

### **8.3.2 Inner-ecological conflict and planning authorities**

Another facet of the inner-ecological conflict emerges within the German licensing institution itself, as nature conservation and licensing offshore wind farms in territorial waters are part of the remits of one and the same authority. This specific expression of the inner-ecological conflict manifests through overlapping competencies within the administrative institutions. This institutional conflict is associated with the jurisdiction of the Agency of Agriculture and Environment, being the licensing authority for offshore wind farms in territorial waters and the Lower Nature Conservation Agency at the same time. Dealing with both remits at once results in the conflation of expertise. Of course, on the one hand, assigning the nature conservation agency with the implementation of infrastructure planning processes seems to be useful due to their expertise. But, on the other hand, adhering this expertise may lead to internal struggles when it comes to the siting of renewable facilities, as indicated in the following quote:

“The problem was the responsible specialist nature protection agency, here in the building. They mostly submitted fairly critical representations, which practically verged on a rejection. And we really had to move ourselves together with the colleagues to a constructive line in a really long argument and negotiation process. That took a very long time. And we had to ultimately furnish the licence with nature conservation related restrictions in order to obtain acceptance from them.” (*Interview, Licensing Authority, Baltic 1, 2010*)

The licensing authority had to deal with both sides of the inner-ecological conflict, but the clear immanent predicament between two contradictory goal orientations was slugged out within the division of nature conservation.

“This wasn’t easy at all. This was a huge amount of work, especially because the nature conservation colleagues have a very close emotional position to the [non-governmental] nature protection associations. There simply is an intellectual and conceptual overlapping. They are not able to divide it between their conscience and their work. In some cases, they are even members of the [non-governmental] associations, which doesn’t make it easier.” (*Interview, Licensing Authority, Baltic 1, 2010*)

So the department of nature conservation was in the powerful position to influentially shape the final appearance of the wind farm, but they could not easily go as far as non-governmental agencies and completely reject a project as they remain

constrained by their governmental responsibilities. In Scotland, SNH regards itself as somehow constrained by their assigned remits to try to find best environmental solutions, instead of just rejecting everything in the first place, as independent environmental charities can do (Interview, SNH Perth, 2011). So the agencies in Germany and Scotland ultimately seek to find best solutions to combine nature protection with wind farms on-site by imposing particular environmental restrictions to the wind turbines. However, the reconciliation of both sides is pre-conditioned and controlled by environmental laws enshrined in the Federal Nature Conservation Act (Germany) and Marine Conservation Scotland Act. In particular, instruments of the Federal Nature Conservation Act in Germany have been explicitly expanded to cover the Territorial Waters and Exclusive Economic Zone (LÜTKES 2011). So this ramification of the conflict is also basically reflected in the legislative framework which promotes renewables but conveys laws to protect the nature to which planning authorities are bound. The task of the authorities is to work things out so that they comply with the given legislative standards, even if this may amount to compensation measures and payments as a last resort.

However, in the first instance the respective agencies are concerned with the designation of suitable areas. This fundamental step is meant to lead to avoidance of environmental conflicts before the actual planning of a wind farm starts. Suitable areas with least expected impacts are designated by means of the exclusion principle and with the assistance of expertise of various stakeholders. So the reconciliation of nature conservation and offshore wind farms is also shaped by the question of *where* to site the wind turbines:

“Through that [impact assessments], it is to make sure that the development takes place in the best possible locations. And again, for that we use a kind of a sustainability appraisal approach, which involves a strategic environmental assessment, habitats regulations appraisal, socio-economic assessment and consultation analysis. And consultation analysis is important because that is when we consult on various aspects, ascertain people’s views and feed them into the process of developing the overall final plan for either offshore wind or marine renewables.”  
(Interview, Marine Scotland, 2011)

Similar to environmental organisations, administrative agencies regard environmental conditions of a particular location as the crucial element in the conciliation of the inner-ecological conflict. The primary idea underlying the understanding of authorities about achieving local and global sustainability is to site offshore wind farms in suitable locations only. The identification process of suitable areas involves environmental assessments, the reconciliation with internationally



protected areas and the consultation of experts and local people, in order to ensure a sound and rigorous decision. In contrast, in Germany the suitability of designated areas is also questioned by referring to the political pressure driving the process:

“As far as I know, the Federal Agency of Nature Conservation was consulted for the priority areas in the EEZ, and the responsible nature conservation agencies for areas in the 12nm zone. But this has happened under huge time pressure. In an exaggerated way, hurry up, tomorrow I want to know where we are allowed to build and where we are not allowed. Consequently, we can argue about the priority areas.” (*Interview, BUND, 2011*)

The concern about the non-excludability of unsuitable priority areas is raised in the same way as the time-wise insufficient scope of environmental assessments are criticised. This storyline essentially implies that objectives of global sustainability are privileged over local sustainability. The clashes of different scopes of sustainability, comprising the sustainable preservation of locally demarcated ecosystems and the global environment, which inform environmental policies and development plans, reveal that conventional and locally bounded approaches to sustainable development are now challenged through the imperative of tackling climate change (OWENS & COWELL 2011:13ff). Given potential impacts of wind farms, sustainable development with a global focus does not necessarily include an environmentally sustainable maintenance of local areas. Thus, planning for environmental sustainability is exposed to the dilemma of prioritising a particular idea of sustainable development and has to aim at the creation of mutually beneficial policies for the local and global environment.

In summary, the inner-ecological conflict within administrative authorities demonstrates that they have to reconcile the interests of multiple spatial scales, the national interest and supranational agreements that both have to be realised at the local level. So, there are two strands intrinsic in the legislative framework generating breaks in the ecological discourse within planning institutions. The first break in the ecological unanimity is caused by conflicting competencies within the licensing authority, especially in Germany. The second break, relevant in Scotland and Germany, results from conflicting national and international discourses of sustainability impelling nature conservation and renewables at the same time, which both come together in and coordinate the practices of the planning agencies. The reconciliation of both discursive strands within the agencies manifest in the search for suitable areas for offshore wind turbines, in which environmental impacts can be minimised in comparison to less suitable areas.

### **8.3.3 Expert knowledge, the public and missing advocates**

As the two case studies have shown, the inner-ecological conflict does not only take place on a practical level of reconciling offshore wind farms with a particular ecological setting. Another dimension beyond the practical engagement with local environmental impacts embraces the epistemological determination and characterisation of environmental conflicts in a particular location. The impact-related local side of the inner-ecological conflict involves questions about the knowledge construction of impacts to be considered in planning. Inquiring after relevant knowledge to determine, classify and quantify environmental impacts necessitates the question about capable and authorized actors who decide what impacts are expected and what impacts need to be debated in the decision-making process. So the determination of environmental impacts is fundamentally related to expertise, knowledge about the local marine environmental conditions and consequential effects in conjunction with offshore turbines.

Since the marine environment has been rarely confronted with permanent infrastructural installations, there has been a lack of knowledge about its ecological balance and the consequences of external influences (KANNEN 2005).<sup>71</sup> This requires specific expertise to evaluate the particular marine setting in which turbines are to be placed. In the case of offshore wind farms, this specialised knowledge is gained through consultation with organisations and agencies whose jurisdiction and remit cover the marine environment and who have therefore the ability to contribute knowledge to the planning process in general and to the occurrence of likely environmental effects in particular. The planning agencies appoint respective experts from whom they demand proficiency to point out potential environmental conflicts. The scope and direction of environmental assessments are defined on the basis of their knowledge. In addition to environment-related knowledge broadened through case-specific assessments and monitoring, environmental data can also originate from findings of existing offshore wind farms. This epistemological dimension of the inner-ecological conflict is framed by the planning authorities' need to substantiate their decisions with facts and quantifiable knowledge, even if indeterminacies in the knowledge gained cannot be fully ruled out. However, environmental conflicts are informed by experts in two regards: through their assistance in designating priority

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<sup>71</sup> However, this does not necessarily apply to the Scottish context, which has been confronted with offshore developments of the oil and gas industry. However, oil platforms in the North Sea are mostly located further offshore than planned wind farms.

areas aiming at an environmentally benign siting of wind turbines; and the knowledge-based assessment and mitigation of definite impacts.

In contrast, citizens from the public are usually not equipped with the resources to create their own environmental assessments, and their environment-related arguments rely on tacit knowledge from the public discourse or on knowledge previously obtained through expert assessments.<sup>72</sup> This subordination has been reflected in the implicit hazard of ship accidents or in the potential impacts on sharks and Great Northern Divers which were only seized upon after they had been uncovered through expert assessments. In particular, the communities on the Darß peninsula commented only previously created assessments and explicitly internalised the assessments of the BUND. However, local citizens certainly possess a personal consciousness and reflexive understanding about the process of how wind turbines may affect the environment, but their factual knowledge summoned up in disputes, in terms of a discursive consciousness presuming they can give a coherent account of their arguments (GIDDENS 1984:41ff), seems to be subject to expert assessments. Even if local citizens may not fully agree with the accomplishment and results of the assessments, they have to deal with and utilise this stock of knowledge. Of course, one form of utilisation can involve criticising and questioning environmental results, as it was done by the protest group in Germany. However, in comparison to experts from environmental agencies, developers and planners, the public does not have clear definatory power over the delineation of environmental conflicts and can usually only comment on previously obtained knowledge. They are less capable of challenging scientific authority and creating legitimate knowledge, although they may have their own form of knowledge and may contribute valuable local expertise based on values and experiences (see WYNNE 1996; FISCHER 2005). Non-institutionalised stakeholders, such as fishers or businessmen, certainly have their own relevant knowledge, but their influence and opportunities to be heard in the planning process are restricted and pre-structured by the planning regimes. Particularly in the German case study, the technocratic orientation of the planning process towards expert environmental assessments necessitates scientific knowledge while overriding specialised lay knowledge.

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<sup>72</sup> This may not necessarily apply to the Tيرة Community who joined ARC and commissioned a socio-economic impact assessment for which they were later financially reimbursed by SPR.

Besides the flow of information generated by experts regarding the impact-related perspective of the inner-ecological conflict, it is surprising that the other side of the conflict, global benefits of wind farms in terms of carbon reduction, remains rather silent in the debates contended at the local level. The global ambition and imperative of wind farms is not explicitly acknowledged, neither by the authorities nor the public in Scotland and in Germany. The missing significance ascribed to renewable energy results in a one-sided discourse of local environmental impacts of wind turbines. The purpose of renewable energy framed as an overarching discourse seems to become only relevant as tacit knowledge which does not seem to be worth explicating by advocates (see conclusions). Pro-renewables storylines, national and global benefits that pervade national strategies are not explicitly articulated at the local level when offshore wind farms are being negotiated. This is perhaps due to the fact that the siting of wind farms rather stimulates opponents or critics and that planning and licensing agencies try to keep a pragmatic and objective position. Only opponents try to devalue and depoliticise the significance of renewables, while advocates remain hidden and do not fully voice their support at the local level. This neglect is perhaps because adverse local effects of wind farms are perceived to outweigh global and local benefits of mitigating climate change, although studies tend to disagree that climate change impacts are perceived as psychologically and spatially distant (DEVINE-WRIGHT 2013b). Hence, the practical implementation of environmental policies, in terms of the planning process for offshore wind farms, seem to be less successful in balancing the “regional, statewide, national, and even international benefits of wind power and other renewable energy facilities against their localized impacts, real and perceived” (WICKERSHAM 2004:345).

However, this also means that an explicit reference to climate change is likewise absent in the practical negotiation of conflicts, although the climate change argument co-shapes the hegemonic discourse through which the building of wind farms is justified and legitimised, as discussed earlier in Chapter Four. As the case studies have demonstrated, only a few stakeholders refer to climate change at all, which has either been expediently done to accuse the Scottish Government of actionist behaviour towards renewables or to construct a more positive image of Baltic 1 after it could not be prevented. Reducing carbon emissions and establishing renewables is seen as unnecessarily too ambitious by the NTA members, whereas the climate changes discourse makes the wind farm more acceptable and justifiable for the tourism association in Germany, as reflected in the following quotes:

“So, honestly the EU targets are much too high and then they got Alex Salmond who is possessed by the idea of renewables. And he wants, seriously, 100% by 2020, all these pressures are wrong, we can't do it. It is just too fast. [...] The politics behind this, Alex Salmond putting pressure on people is disgusting. It really is. This is the worst thing about this whole, this whole renewables charade.” (*Interview, NTA, 2011*)

“We reflected upon how the wind farm can be offered without damaging the image of the region. And the whole climate change debate plays luckily into our hands. Many tourists have already had other views on the wind farm. [...] It is very interesting, this change in attitudes of people, this shift in the evaluation of particular issues.” (*Interview, tourism association Baltic 1, 2010*)

The second quote can also be indicative of a positive change in attitudes towards unwanted projects after their installation (WOLSINK 2007a, VAN DER HORST 2007). But references to climate change were not articulated in favour of wind farms and only potential negative effects came forward in the debates at the local level. As mentioned before, most stakeholders only consider wind farms *per se*, as a variously disruptive object, without reflecting on their necessity or broader meaning. The overarching discourse of climate change makes it rather challenging for opponents to bring counter-arguments forward, and concrete environmental impacts appear to be one promising and tangible counter-argument for them. But interestingly, the planning and licensing agencies do not privilege the significance of wind farms for attaining international commitments of carbon reduction and climate change either; they rather treat the siting of wind farms as any other infrastructure object in a pragmatic and goal-oriented way. In specific planning applications the prevailing climate change discourse is perhaps suppressed by the planning process which is structured in a way of land management. In such a planning process framed by land use policies, onshore wind farms are equated with any other competing land use, and macro-scale benefits of onshore wind farms become only cursorily acknowledged (ABBOTT 2010:973). This issue can also be referred to offshore wind farms. Here, the problem, to some extent, originates from missing, indefinite or inchoate marine policies and the adaptation and devolvement of terrestrial planning systems to territorial waters in Germany. The lack of specific and advocating planning approaches for offshore wind farms elucidate the importance to assess and designate priority areas for wind farms before any definitive application process.

In contradiction to this impartial handling of wind turbines within environmental impact assessments, WICKERSHAM (2004:345) argues for a rethinking to conceive renewables as “mitigation measures that will offset or even reverse the otherwise unavoidable negative impacts of carbon emissions”. He proposes the radical thought

to weigh likely impacts against direct carbon reductions as a benefit of a particular wind farm by means of an “environmental benefit statement” (2004:346) in order to bring climate change back to the debates about the specific wind farm projects. In consequence, the benefits of wind farms should also be regarded as such in the environmental assessment and offset against expected impacts, instead of unilaterally focusing on their local impacts. In particular, this rationale seems to be missing in the wind farm application debate. Therefore, it is useful to turn attention to the question of to what extent environmental aspects are prioritised in the existing planning policies as well as at the specific local setting. The general problem of missing advocates at the local level accrues from the different scales of governance and its disparate priorities.

#### **8.4 Environmental aspects in planning: Uncertainties and compensation**

“Yes, I think that it is possible to reconcile both things with each other. I think there are sites where we can say .... I mean it is always destruction. It would be naive to say there are sites in which I place something and everything stays the same. But there are certainly locations where effects are less dramatic.“ (*Interview, BUND, 2011*)

The virtue of environmental impact assessments takes somehow for granted that human actions always interfere with and harm the natural environment (WICKERSHAM 2004). Such a premise is underlain by a particular understanding of the natural environment. The environment or nature is objectified as a precedent and pre-existing entity which has always been afflicted with human intervention. So the destruction of nature by wind farms is based on the understanding that separates society and nature. But the question about wind farms reflects an even more ambiguous burden for the environment. On the one hand, wind turbines may have certain adverse effects on the local environment, but on the other hand, climate change may have an even more adverse effect on the environment, even though not necessarily on the same location. Therefore, the precise statement that “global warming and climate change pose greater challenges to the ways in which environmental laws weigh the impacts of human actions” (WICKERSHAM 2004:344) also imposes highly moral and ethical questions on the practical management and weighing of local environmental impacts, especially when actual impacts are uncertain. The question is whether local environmental qualities should be sacrificed in favour of wind farms. Hence, planning and licensing authorities are confronted with the weighing and appraisal of environmental values as well as uncertainties

about impacts. They have to judge which environmental impacts are acceptable or unacceptable (WARREN et al. 2005).

As mentioned before, knowledge about impacts on the marine environment is fragmentary, and rigorous research into impacts needs time. This is why environmental organisations advocate prolonged and exhaustive impact assessments. But even then, research may not be able to provide substantial information on likely impacts as only a marginal number of causalities may be sufficiently predictable. This remaining uncertainty counteracts the expeditious expansions of offshore wind energy and prompts stakeholders to privilege the significance of the local environment:

“If the surveys come back and there is no way to mitigate against the potential impact on a European protected species or another designated site, then we would obviously advise that the project can’t go ahead if there is no way to mitigate against it and they only have to consider compensatory measures or alternatives to the development.” (*Interview, JNCC, Aberdeen, 2011*)

“I’m still thinking, especially because it is not possible to completely offset and compensate, the resource marine habitat should be treated very cautiously. It has to be proved beforehand if this has really to happen, has it to be in that way and what do I destroy. [...] But as long as you don’t know about that you have to deliberate very carefully. And then this compensation is certainly not helpful, especially not this sale of indulgences, because they often try to reduce the payments. [...] So they have to look for compensation measures and in certain cases in which compensation is not possible you have to deliberate if you really want to go for this location. This simply means that this site has to be dropped.” (*Interview, BUND, 2011*)

Both quotes from environmental organisations take for granted that wind farms cause direct physical damages to the marine environment. The essential questions are rather if and how these damages can be mitigated or compensated with the consequence that an inadequate implementation of compensation measures should inevitably result in the renunciation of the location. But implementing compensation measures for marine impacts is barely viable in the marine environment<sup>73</sup>, which does not make compensation the best option for dealing with environmental impacts. Besides these implications attached to practical compensation measures, this also basically reflects the prioritisation of the local environment over offshore wind farms, as “wind farms should under no circumstances be licensed and built without environmental problems being identified” (*Interview, BUND, 2011*). Those claims assert pressure on the planning agencies and undermine national strategies

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<sup>73</sup> The marine environment does not leave many options for the compensation of physical impacts, other than protecting other areas from any external interventions or creating artificial reefs. E.g. potentially scared off or killed marine animals cannot as simply and equally be compensated as cut trees onshore.

prioritising offshore wind power over other uses. Hence, planning agencies become even more confronted with the uncertainties revolving around nature protection and political desire to tackle climate change at the local level. Since wind turbines are supposed to cause environmental effects, planning agencies are urged to regard climate change and nature conservation as a mutual interrelationship which weighs both sides equally. But this relationship seems to be often muddled in the public discourse:

“It’s a bit like, and some stakeholders understand it like that, that implementing wind energy already means doing nature protection. By building a wind turbine against climate change you are doing nature protection. Then you have to say: no folks, that’s also an intervention and must be considered as such. If it is okay to build, then no one can say anything against it. But there is no special status. Otherwise, the next one wants to build an oil port or a container port somewhere, and says I am allowed to build as well without having any documents.” (*Interview, BUND, 2011*)

According to the quote, energy companies are blamed for disregarding a dual relationship, to comprehend the correlation one-sidedly and to equate their activities towards climate protection with nature conservation in order to legitimate their interventions and to detract from possible negative impacts. Climate protection is often equated with or reduced to nature conservation, but both have to be kept separated, otherwise there would be no need to do impact assessments, as suggested in the previous quote. This conflict line clearly reflects the inherent ambiguity between climate protection *as* nature conservation in terms of protecting nature by avoiding future adverse effects of climate change, and climate protection *vs.* nature conservation with regard to immediate environmental effects. Therefore, planning agencies should have to weigh prospective against immediate environmental impacts, whose scope remains nevertheless uncertain. The conflict, however, corresponds with the previously mentioned claim by WICKERSHAM (2004) to treat the expected benefits of wind farms and expected local impacts equally in order to gauge them in a more straightforward way.<sup>74</sup>

In consequence, planning agencies have to reconcile two different conceptions of the marine space that underpin the inner-ecological conflict. Marine space is reified as a resource in both conceptions. On the one hand, it is constructed as resource for marine life, as a marine habitat, which reflects the local environmental side of the

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<sup>74</sup> Other aspects to be included in the weighing could involve impacts on the marine environment through conventional energy production, such as oil rigs and oil transport, which could be offset by means of renewable energy production (BYZIO et al. 2005).



conflict. And on the other hand, it is regarded as resource for preventative activities to produce sustainable energy and to protect the global environment in the long run. Thus, the marine environment or nature within the national-political arena becomes politicised in two conflicting ways.

However, direct environmental impacts in terms of physical interventions are only one environmental aspect to be considered in the planning process. More uncertainty originates from aesthetic and visual impacts on the seascape, which entail a large subjective component that is even more challenging to situate within environmental assessments. So planning should “acknowledge that our perceptions of beauty and visual impacts are cultural constructs, in a way that physical impacts on birds, or fish, or wave patterns, are not” (WICKERSHAM 2004:343). In contrast, as mentioned at the beginning of this chapter, it is contested that those physical impacts are not socially constructed and only objectively invoked within the conflict as elements of a coherent nature. Allegedly objective impacts may also lead to different interpretations depending on employed measurements and underlying valuations. But precisely this differentiation between direct impacts and subjective intrusions is increasingly re-merged in the planning process in order to do justice to competing interests, such as tourism, natural heritage and livelihood (SCOTT et al. 2005). Land- and seascape aesthetics have therefore become an integral part of the Strategic Environmental Assessment in Scotland:

“We have to advise the government on landscape and visual impacts; and obviously local communities have concerns about landscape and visual impacts. So, we do get a lot of correspondence from local communities and third parties on that aspect. So, our main involvement is trying to make sure that the developers are clearly explaining and illustrating what landscape and visual aspects might occur. So there is a whole series of SNH guidance.”  
(*Interview, SNH Perth. 2011*)

## **8.5 Summary**

The siting of wind farms basically reveals a conflict between the environmental micro-goal of protecting individual ecosystems and the macro-goal of decarbonising the energy sector (YONK et al. 2013). In summary of this conflict, the lack of thresholds for evaluating various tangible environmental impacts starting with noise emissions during the construction right through to aesthetical valuations complicates the decisions to be made by planning and licensing authorities. Imposing tangible environment-related thresholds, guidelines and regulations would make the planning process more straightforward, the decision-making process more consistent and

transparent and would therefore go some way towards tackling uncertainty encompassing environmental impacts and compensation. However, ascertaining thresholds and limit values requires immense research and monitoring in first place, but may yield more preventive procedures for demarcating the *where* and *how* to place offshore wind farms in the future. But as indicated in the previous discussion about different and socially constructed valuations of natural objects, such scientifically obtained thresholds may also be differently constructed and perceived by different groups and become contested. ‘Objective’ thresholds may then appear as ‘subjective’ reflecting the disjuncture between the beliefs of the local public and scientific evidence.

Such a disjuncture is also reflected in the interpretation of the need of wind farms as their planning is driven by national and international policies embedded in a climate change discourse rather than by democratic decisions involving citizens. For local people immediate environmental changes are perhaps more tangible, whereas uncertain long-term implications of climate change appear less pressing at the local level (PEPERMANS & LOOTS 2013), although this is doubted by others (DEVINE-WRIGHT 2013b). From the local perspective, the locally anchored discourse of nature conservation may not fit together with national and global strategies towards climate change. But this incongruity of the two discourses appears already at the national scale and pervades all different administrative levels. There is more than just the climate change discourse that features downstream implications, like national schemes for the protection of biodiversity and habitat regulations, which are likewise inherent in the environmental conflict over offshore wind farms. Therefore, it is important to understand the narratives related to different options for mitigating climate change and to “develop a better understanding of the different motivations citizens and stakeholders may have for opposing or supporting these options” (VAN DER HORST & VERMEYLEN 2011:466) in first place.

An all-embracing question with an undeniably uneasy answer, but which nevertheless fundamentally frames the inner-ecological conflict, is how the emphasis of local environmental impacts and pure aesthetic values can be justified when being faced with the dramatic need to cut carbon emissions in order to reduce unforeseeable large-scale environmental impacts? Addressing this problem entails again highly moral and ethical questions and yet only finding a balance between both strands seems to be the most promising path for decision-makers at the moment,

without prioritising one or another, and by taking into account the socially constructed nature of impacts and assessments.

**Table 8: Summary of inner-ecological conflict**

### Inner-ecological conflict

Global Climate protection	Local environmental protection
<ul style="list-style-type: none"> <li>• wind farms tackle climate change</li> <li>• global long-term benefits</li> </ul>	<ul style="list-style-type: none"> <li>• marine nature conservation</li> <li>• direct local impacts</li> <li>• adjacent protected areas</li> <li>• ship collisions and oil spill</li> <li>• damage of seabed</li> </ul>

**Causes:**

- environment-related arguments on both sides
- uncertainties about local environmental impacts
- uncertainties about most suitable construction practices
- indeterminate long-term ecological burdens at localities
- no thresholds to determine impacts
- inappropriate compensation measures for the marine area
- insufficient assessments

**Diagnosis:**

➔ *break-lines of inner-ecological consensus:*

- flaws in construction and environmental assessments of offshore wind farms (how)
- inconsistencies in designation of suitable areas (where)
- conflicting competencies of licensing authority in Germany

➔ conflict related to questions of *how and where to build* offshore wind farms underpinned by the *adequate time frame* for assessments

## **CHAPTER NINE: THE ARENA — Planning Disputes – Uncertainty, Rationalisation and Power**

### **9.1 Introduction**

This chapter is concerned with conflicts related to the legislative and regulatory frameworks in Scotland and Germany. The objective is to describe and analyse what disputes and controversies emerge from the given planning regimes, and also to show how the planning systems deal with and inform particular conflict-related issues. The planning systems are the institutional settings that regulate and structure the conflict-related practices, power relations and action possibilities by providing opportunities and constraints for involved actors (ERNSTE 2012) and for the construction of knowledge in the policy-making (RADAELLI 1995). In doing so, the institutional setting gives stability to shared beliefs and discourses, structures meaning, creates stakeholder networks and constrains the perception of interests (RADAELLI 1995:178). It basically pre-structures the public participation and decision-making processes. When reconceptualising spatial planning through the lens of the previously outlined theoretical guidelines it can be conceived as the structural and institutional side of the conflicts. But spatial planning is not just the institutional arena in which the consideration and negotiations of conflicts take place. Planning regimes are shaped by powerful interests and have to be enforced by powerful actors of the planning and licensing authorities. In turn, those actors who are competent to make decisions on sites and land uses shape the planning process. In the sense of ‘geography-making’ (WERLEN 1997), competent and powerful actors “make choices between places and interpretations of places” (ERNSTE 2012:91) and ascribe meaning, purpose and value to spatial conditions. In that sense, through the imperative and focus of spatial planning on the management of different land uses, the offshore space and seascape is reified as a bureaucratic object of planning. But they do not just make sense of and give meaning to the spatial conditions, but they also attach particular ideas and imaginings to other stakeholders (WALKER et al. 2010).

It will be shown that both planning regimes are rather technocratic and hierarchically structured, even though the Scottish planning system leaves more opportunities for the public to get engaged in the decision making process than the German one, whose planning procedures as well as the imaginaries of the public subjectivities

hamper the participation of the wider public and affected communities. In addition to different perceptions of the affectedness of the ‘local’ public by responsible authorities, imprecise jurisdictions and immature designation strategies for both wind farm sites lead to further inconsistencies in planning. Planning disputes that have evolved from the case studies in Scotland and Germany are described first, before the attention will be turned to deeper implications of these disputes.

## **9.2 Planning Controversies in Scotland and Germany**

Spatial planning in both countries is aimed at the identification and mitigation of conflicts that emerge from the object at stake. With regard to offshore wind farms, planning and licensing is concerned with the identification of various clashes of different land uses as well as the externalities of the wind turbines emitted to their immediate surroundings. Controversies in planning arise primarily from the fact that offshore wind farms are a relatively new object of planning and from the lack of appropriate marine spatial planning policies, which were only put in place as the first offshore developments had progressed in Scotland, while terrestrial policies were expanded and applied to the 12nm zone in Germany. Those temporal inconsistencies relate particularly to the designation of suitable priority areas for offshore wind farms and the designation of protected areas, which led to parallel and overlapping processes of policy-making for the legislative framework and of the actual planning of wind farm projects. A comparison of key issues of planning within the territorial waters (12nm zone) is summarised in the following table.

**Table 9: Comparison of planning policies as employed to Argyll Array and Baltic 1**

	<b>Argyll Array</b>	<b>Baltic 1</b>
<b>Planning Policies</b>	<ul style="list-style-type: none"> <li>- site designation by Crown Estate; selection by developer</li> <li>- planning and decision by Marine Scotland</li> <li>- SNH is statutory consultee</li> <li>- dialogue with, liaison with and consultation at local level and affected communities</li> <li>- SEA applied in a centralised process for different projects</li> </ul>	<ul style="list-style-type: none"> <li>- site selection by developers; parallel designation of priority areas by planning authority</li> <li>- spatial planning by Ministry of Labour, Building and Regional Development</li> <li>- decision by Lower Nature Protection Agency</li> <li>- the public and environmental organisations were informed and heard and could comment on the development</li> <li>- SEA is only required for broader development plans and programs; EIA at project level</li> </ul>
<b>Problems</b>	<ul style="list-style-type: none"> <li>- Marine Scotland could not select suitable areas at first</li> <li>- revenues go to UK HM Treasury</li> <li>- parallel designation of protected areas</li> <li>- unclear maintenance and operation of Argyll Array leads to uncertainties about onshore impacts</li> </ul>	<ul style="list-style-type: none"> <li>- no particular marine spatial planning for territorial waters of Mecklenburg-Vorpommern</li> <li>- parallel planning of Baltic 1 and designation of priority areas for offshore wind farms</li> <li>- communities are only formally consulted → felt excluded from planning</li> <li>- concerns of ‘affected’ communities tend to be dismissed as emotional and irrational</li> <li>- development of individual projects tends to neglect cumulative effects</li> </ul>
<b>Diagnosis</b>	<ul style="list-style-type: none"> <li>- onshore impacts are considered → may lead to rejection of project</li> <li>- environmental organisations influence the development process and the final appearance</li> <li>- planning process is consensus-oriented and makes use of collaborative and deliberative strategies</li> </ul>	<ul style="list-style-type: none"> <li>- planning system tends to be technocratic, but most concerns are anthropocentric</li> <li>- focus on site-specific conflicts and impacts</li> <li>- less transparent consideration of socio-economic repercussions → facilitates resistance</li> <li>- planning process is outcome-oriented based on information provision</li> </ul>

All issues can basically be divided into controversies which either emerge from problematic jurisdictions and competences of involved stakeholders and immature policies, or from the predefined engagement opportunities for different stakeholders.

### **9.2.1 Jurisdictions over territorial waters and policies**

The territorial sea consists of the coastal waters that extend to the 12nm border, which delimits the Exclusive Economic Zone (EEZ). Both wind farms are situated within the territorial waters, which contributes to particular jurisdictional conditions that inform various controversies. The scope of legal competencies and power over

the territorial waters as well as the applied policies resulted in disputes that found expression in the siting of Argyll Array as well as Baltic 1.

In Scotland the devolved Scottish Government has jurisdiction over marine planning matters within the Scottish territorial waters (0-12nm), and marine planning of the Scottish offshore waters (12-200nm) is exclusively devolved to the Scottish Ministers. Nevertheless, the seabed belongs to the Crown Estate. “The Crown virtually owns all of Scotland’s seabed [... and] if the CEC<sup>75</sup> agree to a proposed use, they will grant permission through a lease or other legal agreement and charge rent or other fees” (HOUSE OF COMMONS, SCOTTISH AFFAIRS COMMITTEE 2012:39). This is essentially what happened under the Crown Estate’s leasing round for Scottish territorial waters through which ScottishPower Renewables secured exclusive rights to develop Argyll Array. This means that the Scottish Government was basically excluded from the designation of offshore wind farm sites. The site selection was wholly undertaken by the developers who approached the Crown Estate to gain agreements for developing the sites. Following the award of agreements for ten sites the Scottish Government came into the picture and announced a Strategic Environmental Assessment (SEA) to identify suitable areas for offshore wind farms in the territorial waters while treating the ten sites for which the Crown Estate had already granted exclusive agreements to developers as short-term options. The agreements from the Crown Estate for those sites were conditional on the findings of the SEA, which concluded that all short term options, including Argyll Array, could be progressed. In the end, six sites were given approval in the Sectoral Marine Plan by the Scottish Government and were given agreements for lease by the Crown Estate. So the project could go forward to get a marine license, which includes the actual planning process including project-specific assessments. Once the marine license is granted, which corresponds to building consent, the developer gets the lease from the Crown Estate to use the ground. So, the planning process should be ideally shared by the Crown Estate and the planning authority (Marine Scotland) based on the selection of suitable sites identified in the Sectoral Marine Plan and Regional Locational Guidance, which should guide developers in selecting sites. But because of the missing guidelines for the first leasing round in Scottish territorial waters, the site selection was completely up to the developer’s discretion. Wind farm sites had been designated by the developers and the Crown Estate before adequate legislation was in place:

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<sup>75</sup> CEC, Crown Estate Commissioners

“Now what has happened is that all these offshore renewables proposals, so offshore wind and wave and tidal development, are slightly happening in advance of that wider planning reform. So we’ve got the proposals in and being taken forward before the system considers them against the range of different uses of the sea and against the range of environmental interests, before that system is properly put in place.” (Interview, SNH Perth, 2011)

“But still, a bit later, you will be aware that the Crown Estate has a role in this because they lease the seabed. A more planned approach would have been to do that SEA prior to the Crown Estate leasing round and apparently there was the opportunity for the government to do that and they decided not to because they didn’t think there was a lot of interest from the developers of offshore wind. But it turned out that there was a very high level of interest. So then the Crown Estate took forward a leasing round without the SEA and that only came a lot later. So this is why we have this kind of difficult situation at the moment?” (Interview, SNH Perth, 2011)

This early problem of a lack of coordination prompted the Scottish Government to identify short-term and mid-term options for future offshore wind energy by establishing the Draft Plan and Sectoral Marine Plan for offshore wind farms. Those plans included a SEA that had subsequently been applied to already proposed wind farm sites. The same temporal problem occurred regarding the designation of protected marine areas, which were deployed belatedly in comparison to the advancement of the first offshore wind farms, resulting in simultaneous processes of designating areas for protection and for wind farm projects.<sup>76</sup>

But despite the future ability to coordinate the site selection, questions about the jurisdiction and powers over the offshore area remain unresolved. Although the role of the Crown Estate in leasing parts of the seabed for particular uses seems to be merely bureaucratic, it leads to wider political issues. In fact, the Scottish Government does not own the Scottish territorial sea, but it regulates and determines the planning procedures for particular uses. The issue of ownership puts the Scottish Government in a less powerful position as revenues from the lease go directly to the UK Treasury while bypassing the Scottish Government and regional authorities that cope with the wind farm developments. This also implies that coastal communities are not incorporated in the immediate site selection since they do not have any jurisdiction over the offshore area, but they had been consulted during the identification process of suitable areas for further designation rounds which led to the marine plans. Planning issues of Argyll Array are therefore engendered by a complex mesh of intersecting jurisdictions and unpremeditated marine policies, involving the

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<sup>76</sup> The Scottish Marine Protected Area Project is a joint initiative between SNH, JNCC, Historic Scotland and the Scottish Environment Protection Agency (SEPA) in order to guide the development of an ecologically coherent network of marine protected areas. Consultations run by Marine Scotland on marine protected area proposals are scheduled for summer 2013.



Crown Estate, Marine Scotland and developers who all worked parallel, but did not productively intertwine from the beginning and may only complement each other with regard to future projects.

Since the jurisdictions of authorities over the territorial waters in Germany were pre-arranged they turned out to be less conflict-laden. The federal state is in charge of managing, planning and licensing developments within the 12nm zone. Controversies have rather emerged from the missing marine planning policies targeting offshore wind farms. This is why conventional territorial planning procedures have been expanded over the territorial waters, once the rising and new demand of marine uses was recognised. However, similar to Scotland, this was only happening while Baltic 1 was under consideration for planning permission:

“This was quite interesting for the planning of Baltic 1, as the designation of suitable areas proceeded in parallel. The spatial development programme didn’t exist at the time when the application for the conduction of the Spatial Planning Procedure for Baltic 1 was being filed. It was in progress, so that we already had initial thoughts about the location of suitable areas, but it wasn’t definite.” (*Interview, Planning Agency, Baltic 1, 2011*)

An essential problem for coastal communities consists in their legal unaffectedness as the offshore space is not part of their jurisdiction, which substantially constrains their engagement in the planning process. The communal and district level does not have any decision-making power over the offshore space, which annihilates efforts to anchor anti-wind turbine schemes in local planning, as attempted by the District of Rügen. Nevertheless, during the scoping process communities and districts were regarded as being affected by the wind farm because of its likely visibility and were thus consulted during the spatial planning process (*Interview, Planning Agency, Baltic 1, 2011*).

Finally, as further essential stakeholders, the jurisdiction of environmental organisations over the offshore area differs between Germany and Scotland, too. The SNH (12nm zone) and JNCC (EEZ) are statutory consultees for the Scottish Government which mediate between the developers and the Government by giving advice on specific requirements for the planning process and related assessments. So they are in the powerful position to shape the way offshore wind farms are planned and constructed. Other than these organisations, the John Muir Trust and the BUND can act more independently and critically, but do not possess any statutory rights.

However, above all, these temporal inconsistencies between different and immature marine policies reflect the novel pressures for land and sea management emanating from the increasing use of renewables as well as the political pressure propelling these processes.

### **9.2.2 Public engagement, affectedness and protests**

The second branch of planning controversies identified in the case studies relates to the participation opportunities of the public. While local people, especially from the coastal communities, may have a legitimate interest in the offshore area, their legal expression is limited in the planning framework. The factual and perceived degree of exertion of influence differs substantially between the Scottish and German planning structures and is essentially pre-conditioned by the extent to which the affectedness of onshore areas is taken into account and how the public is constructed within the planning process. This division is also reflected in the dissimilar consideration of socio-economic impacts onshore.

Policy-makers in Scotland regard coastal residents as crucial stakeholders whose interests and concerns have to be consulted in order to achieve a sound and legitimate decision about offshore wind farms, whereas the German licensing framework does not earmark any particular status for the wider public as they are assumed to be unaffected by offshore wind farms, apart from the potential visual damage of the seascape. The significance of consultation for Marine Scotland is reflected in the following quote:

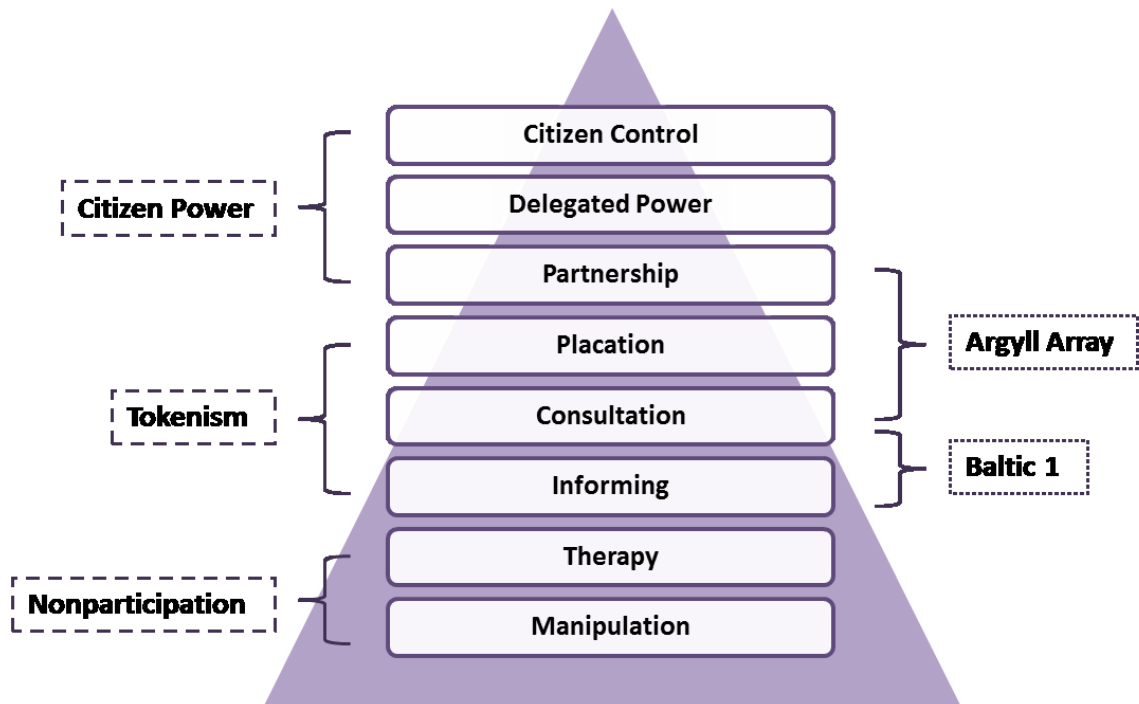
“You have to engage with the communities and get their views upfront. [...] So from that point of view, you have to get this balance right and ascertain what the overall views of these sites are. And there is always a delicate balance, and places like Tiree, the Argyll Array site, which has to be taken forward in a partnership approach with the community to try to find a way forward with the developer and the community. [...] This is the kind of what I am looking for, that the impacts are mitigated and minimised and offset as much as possible. So consultation is a big part of what we do. [...] These are the views of the communities and this is how they are involved in decision-making. That is why we go back to the communities and ask, are your views appropriately captured. And that is very important.” (Interview, Marine Scotland, 2011)  
<sup>77</sup>

In Germany, conflicts with related interests and stakeholders are supposed to be addressed and resolved during the spatial planning procedure that precedes the licensing process which ideally deals with technical aspects only. So the mechanism

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<sup>77</sup> However, the true influence of local residents in impinging on the planning and appearance of an offshore wind farm is still to be proven.

of public engagement encompasses public participation in terms of a dialogue between the affected public and the planning authority in Scotland, and the communication of the project to the public with the possibility of subsequent public feedback in Germany. The latter one can be referred to as public consultation rather than public participation (ROWE & FREWER 2005). The tool of consultation in Germany is provided by the opportunity to produce written representations and to attend public hearings that are restricted to qualified stakeholders. In contrast, a dialogue is actively sought by Marine Scotland in which public feedback on certain steps and features of a project is meant to encourage a consensual planning outcome. The advanced participation process in Scotland is also reflected in various community meetings on Tiree, the establishment of a steering group with the community council (Tiree Community Development Trust) and the active liaison between the developer and the community, which all contributes to a mutual flow of information between the community and the project. According to ARNSTEIN'S (1969) famous ladder of participation (see figure 14), a typology of eight stages of public participation, the steps information and consultation as exercised in Germany do not guarantee that citizens' concerns are taken into account in the end, which is framed as tokenism. In contrast, the steering group for Argyll Array can ideally be allocated to the step of partnership, in which some planning responsibilities are shared. But given the uncertain manifestation of further participation the Scottish procedure could also be downgraded to placation, which involves representatives of the public in advising on an issue, but the actual power to judge about the advice remains with the power-holders (ARNSTEIN 1969).



**Figure 14: Characterisation of public engagement for Argyll Array and Baltic 1, following ARNSTEIN (1969)**

The Scottish planning framework can thus be regarded as consensus-oriented, whereas the German framework is rather outcome-oriented by working towards a technically viable and legally legitimate project whose focus is on mitigating impacts (see table 10). Public engagement strategies regarding Baltic 1 appear highly instrumental and driven by objectives of “obtaining planning permission, speeding up decision processes, and minimising complications” (WALKER et al. 2010:941) and are less motivated by the incorporation of rationales and knowledge from the public that might be beneficial for the project.

“We had to look how to clear this up; is there a chance to get it pacified. In some cases it was quite clear that it was not possible to pacify because of the personal opinion that it [wind farm] is disruptive and damages tourism. Sometimes there were really exaggerated views. [...] Yes, there really were such views and those views were propounded very emotionally and intensively. [...] We have to take care that it does not appear like a wall and that it is fit together most sensitively, the visibility is reduced as much as possible. But it can be seen and this has to be accepted.” (*Interview, Planning Agency, Baltic 1, 2011*)

“Yeah, you have to engage with the communities and get their views upfront. [...] we go out and try to meet these people from around the communities who will be potentially affected by an offshore wind development and to ensure to take their views into account, to take them onboard. [...] So from that point of view, you have to get this balance right and ascertain what the overall views on these sites are. And there is always a delicate balance, and places like Tiree, the Argyll Array site, which has to be taken forward in a partnership approach with the community to try to find a way forward with the developer and the community, with both sides of the community to ensure the development.” (*Interview, Marine Scotland, 2011*)

One reason for the advanced public participation opportunities and better consideration of socio-economic impacts onshore can be found in the early involvement of the Argyll Renewables Consortium, the proximity of the wind farm to the island and the unclear maintenance and operation strategies of Argyll Array which entail uncertainties about onshore impacts. In contrast, Baltic 1 is not perceived to cause any immediate ramifications for the coastal communities, other than its visual presence at the horizon and the associated consequences of this. Due to their expected unaffectedness and their lack of legal sovereignty over the adjacent offshore area, communities have not been conceded any particular right of co-determination.<sup>78</sup> In particular, the German planning policy tends to be technocratic by focusing on site-related conflicts and environmental impacts that are sought to be mitigated while less attention is paid to social and economic repercussions, although these seem to be shaping key conflicts. The Scottish planning framework evaluates potential social and economic impacts onshore, but this implies that these can be used as an exclusion criterion for scrapping projects, as it was executed for the Wigtown Bay and Solway Firth proposals. Thus, granting the public a greater voice may endanger the approval of the initial project.

The different scopes of public engagement are also informed by the different impact assessments applied, in particular in the differences between SEA (Strategic Environmental Assessment) and EIA (Environmental Impact Assessment). In Scotland, a SEA is implemented at the scoping stage (Draft Plan) for all proposed projects, which necessitates wide public consultations. In Germany a SEA is only relevant for the establishment of regional development plans and programmes to identify suitable areas, in which “little efforts are made to actively involve the public” (GEIBLER et al. 2013:76), and an EIA is conducted at the project stage, which does not necessarily comprise definite socio-economic assessments.<sup>79</sup> So the public is first informed about planned projects during the spatial planning procedure in which they can review previously conducted assessments. This temporal gap in public consultation can be understood as one reason why protests manifested at an earlier stage of planning in Scotland, as opposed to Germany when resistance only arose at the project level.

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<sup>78</sup> This differs substantially from onshore wind farms. Here affected or adjacent communities have the right to reduce the previously designated priority areas for onshore wind, but not to decline them completely

<sup>79</sup> However, after vocal demands a tourism impact assessment was conducted for Baltic 1, which was structured as meta-study based on a few existing international experiences.

In summary, public engagement in Scotland appears to be consensus-oriented grounded on a variety of public participation instruments, as opposed to the outcome-oriented planning regime towards Baltic 1 which concentrated on the legally required consultation of stakeholders from public bodies. However, as the personal participation of individuals is restricted, the German approach cannot be regarded as public participation, as strictly defined by ROWE & FREWER (2005), although submitted statements from individuals have to be considered and reflected in the decisions. Key differences of public engagement are summarised in the following table.

**Table 10: Comparison of public engagement of communities with specific focus on Argyll Array and Baltic 1.**

	<b>Argyll Array</b>	<b>Baltic 1</b>
<b>Pre-Planning / Scoping</b>	<ul style="list-style-type: none"> <li>• No public engagement regarding specific project</li> <li>• No community engagement before leasing agreement between Crown Estate and developer</li> <li>• Public consultation for draft plan</li> </ul>	<ul style="list-style-type: none"> <li>• Communities consulted regarding designation of suitable areas</li> <li>• Communities attended scoping meeting</li> </ul>
<b>Planning</b>	<ul style="list-style-type: none"> <li>• Public consultation for scoping document</li> <li>• Public participation of affected community on Tiree</li> <li>• Pre-application consultation meetings on Tiree</li> <li>• Liaison / consultation with developer</li> <li>• Participating in steering group</li> </ul>	<ul style="list-style-type: none"> <li>• Written reviews of planning documents from citizens and public bodies during spatial planning procedure as part of legal process</li> <li>• Representatives of communities invited to hearing</li> </ul>
<b>Licensing</b>	<ul style="list-style-type: none"> <li>• not yet accomplished</li> </ul>	<ul style="list-style-type: none"> <li>• Written reviews of planning documents during licensing process as part of legal process</li> <li>• Representatives of communities invited to hearing</li> </ul>

Key implications of the described particularities in planning will be explored in the following sections.

### 9.3 Novel planning process for the sea: Knowledge and uncertainties

At first, conflicts in planning can be ascribed to problems emerging from the relatively new domain associated with a lack of experiences and knowledge as well as accompanying uncertainties. Since offshore wind farms are a novel planning object in both countries, the existing planning systems face particular problems. In particular, the lack of knowledge and experiences present decision-makers with problems, as they usually “use knowledge to make choices, to implement decisions, and to develop standard operating procedures” (RADAELLI 1995:162). That is why a certain degree of uncertainty has to be accepted when making a decision for the first time:

“The assessment and weighting is based on the investigations and evaluations by environmental agencies, nature conservation agencies and associations; whether the investigations and statements of experts and the prognosis related to the compatibility, whether it is transparent and correct or not. And then it often turns out that there are different views on the impacts. It is a prediction; there is no certainty; it is only possible to make estimations to the best of one’s knowledge and belief.” (*Interview, planning agency, Baltic 1, 2011*)

“No, I mean, what we are looking at is the system is new. So everything that is coming out from the Marine Scotland Act, that is a new licensing system. So that in itself, that legislation was to change existing procedures. So it should be improving what was previously there. But it is possibly still a bit early, I would call it the bedding-in phase, you know, Marine Scotland is still sorting themselves out. It is a new system, so it is just trying to make sure it works as well as it can do. I suppose the main way we have been trying to ensure that it goes smooth is to engage in all these pre-application discussions. Until the application comes in, everything that is happening is called pre-application. So we have been putting a lot of effort into the pre-application.” (*Interview, SNH Perth, 2011*)

With regard to Baltic 1 uncertainties and the lack of experiences have been managed by overcautious procedures and lengthy assessments to reduce the degree of uncertainty and to make a more legitimate decision, which is mentioned with regard to the risk of ship collisions (see quotes below). However, this is based on the ethos that it is possible to reduce the degree of uncertainty with more and thorough assessments.<sup>80</sup> Thus, both planning and licensing procedures were coordinated together in order to achieve the most legitimate and least assailable outcome. This is also why the wind farm was only licensed with certain technical conditions. One of these conditions requires monitoring after the construction in order to close gaps in knowledge about impacts and to draw new conclusions, which also corresponds with the imperative of a pilot project:

“This was also a key point [navigation security] where we did some amendments and where further investigations were added in order to get more security, so that it is a reasonable risk.

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<sup>80</sup> This understanding is also reflected in the social construction of scientific knowledge and risk assessments as discussed in 8.3.3).

You won't be able to decrease the risk to be virtually zero; there is always a risk; but we could estimate it as reasonable." (*Interview, planning agency, Baltic 1, 2011*)

"With this wind farm Baltic 1, because it was all completely new for all of us, we tried to minimise the risk to make mistakes, and conducted the spatial planning procedure in coordination with the Stalu [licensing authority]. So we had almost identical investigations for the spatial planning procedure as later on for the licensing procedure. There were only a few supplements, which is very uncommon. The documents for the spatial planning procedure are usually less detailed. But as we had to deal with such a new instance, we decided to do it that way." (*Interview, planning agency, Baltic 1, 2011*)

Uncertainty regarding Argyll Array is more related to the unclear operational strategies. The ambiguity about new maintenance and operation approaches results in a lack of clarity about effects on Tiree. Facing this uncertainty the Tiree Community Development Trust enquired into and mapped the impact of different scenarios to evaluate the best options for the community and to take up a common position in the planning process. However, uncertainty is also produced by continuous advancements in the offshore industry which impose further burdens on the capacity of planners to make decisions. This makes a joint process of planning agencies, developers and statutory experts even more essential, as indicated in the following quotes:

"So this is a whole discussion about how flexible the application process can be if the developers haven't managed to finalise their project details because they might not know exactly what turbines they are going to use, they might not know what foundation types they are going to use. So there is a whole current discussion about that in which we are involved and where we work quite closely with Marine Scotland as to what amount of flexibility we can give the developers in that application process." (*Interview, SNH Perth, 2011*)

"There are going to be steady innovations, for example the decibel restrictions towards porpoises which were subsequently included and asserted. And precisely these regulations are important. [...] I think they [decision-makers] are rather grateful to be using regulatory instruments to permit or decline wind farms with good clarity." (*Interview, BUND, Germany, 2011*)

Additional pressure is imposed by the emergence of novel conflicts. For example, other standards regulated at superordinate levels which pervade all administrative levels have to be negotiated with the siting of offshore wind farms. These standards particularly refer to conflicting environmental policies, such as protected areas under NATURA 2000 and Habitat Directive agreements that characterise the inner-ecological conflict. But the uncertain effects on tourism can also be understood as a novel tension between tourism and the renewables industry that motivated the German planning agency to initiate additional tourism assessment. But because of the lack of the local experiences this was only assembled as a meta-study relying on international case studies from which only minor conclusions could be drawn.



When reconsidering the tourism conflict which is constituted by a lack of knowledge about the future impacts on existing tourism industries, planning authorities refer to knowledge from existing wind farm projects that do not have an effect on tourism to dispel any concerns of coastal communities. So, insights from other micro studies informed decision-makers and made them generalise these findings. But this also means that evidence-based knowledge is not produced within the actual planning process. Planning authorities rather bridged the gap between the micro and macro-scale, while utilizing existing knowledge from other case studies for the planning process to come to the conclusion that impacts on tourism are less likely. In doing so, they created a universal validity that is based on real-life experiences rather than scientific knowledge produced in the planning process. However, in Germany an entanglement of politics and science took place with the production of an assessment on potential tourism effects conducted by the University of Rostock. But this meta-study only brought together results and experiences from other offshore wind farm sites without explicitly looking at the local contextual factors.

These socio-economic conflicts over tourism impacts as well as the inner-ecological conflict have clearly exemplified the extent to which scientific knowledge is required and desired for making a so-constructed objective, well-founded and secured decision. But the existing uncertainty about impacts is also strategically employed to justify the powerful features of expertise and the reliance on a technocratic planning regime, as experts are supposed to provide some kind of certainty, which is contested by opponents.

#### **9.4 Technocratic planning regimes: Expertise and power**

The second controversy relates to the construction and divergent weighting of expertise and scientific knowledge as opposed to supposedly inappropriate lay knowledge and information from the public, which particularly permeates the German planning procedure. Only scientific and objective knowledge is deemed as valuable evidence to fuel the planning process. More efficiency is attributed to scientific and technical knowledge from experts, which is meant to increase the certainty in planning. Hence, the planning system tends to be technocratic while excluding emotional aspects and uncertain valuations. This is primarily reflected in the variant value attached to particular conflicting interests and practices of how knowledge about conflicts is acquired.

Conflicts over offshore wind farms come only into the picture during the planning process, which serves to identify, negotiate and mitigate potential externalities of a wind farm at a particular site. This leads to the questions of how definatory power about conflicts is distributed and what and whose knowledge contributes to illuminate conflicts. The planning procedure forces the planning authorities to decide on whose expertise may be beneficial to describe potential conflicts.

Therefore, the nature and features of the problems and conflicts are structured by the policy-makers and interpreted and re-produced by planning authorities when inviting particular consultees to comment on the project due to their expertise. According to RADAELLI (1995), knowledge finds its way to policy-making and planning either as claims from experts in advocacy coalitions during controversies and conflict situations, or in terms of ideas from policy advisers. And so problems and conflicts become continuously restructured in the planning process, but other issues that are not considered or brought forward by experts become somehow neglected and remain unarticulated in the planning process, such as the cable route which has not yet been mentioned regarding the Argyll Array but played a crucial role in the planning process of Baltic 1. Certain issues and conflicts associated with the expertise from lay people based on their experience and space-related practices were thus not explicitly taken into account, such as the potential loss of fishing grounds and impacts on fish populations that were feared by some fishers regarding Baltic 1. The definition of problems or potential conflicts is subject to the planning authorities that request a certain kind of knowledge by selecting and inviting experts and thus construct the issues that prevail in the planning process. Due to their capability of selecting statutory consultees, as affected stakeholders whose knowledge and expertise may contribute to a successful completion of the development, and excluding others, the definatory power over conflicts and their consideration lies primarily with the planning authorities. Thus, they create a network of powerful actors which predetermines the definition of problems that are dealt with in the planning process. This happened through planning authorities in Germany which invited selected expert agencies to a first application conference as a first step of the planning process. Such statutory consultees can be seen as an “epistemic community” (RADAELLI 1995) that acquires bureaucratic power through their expertise and their role as an accepted advisory committee. However, the legal planning procedure also predetermines to what extent and how a particular

stakeholder, such as the public, communities and agencies, are considered in the process and provides the institutionalised context for actions of consultees and the public. But by separating invited statutory consultees from informed communities, actual power to actively participate in the decision-making process and to define and interpret potential conflicts seems to be predominantly given to official consultees.

But how do local residents and communities define and express the existence of conflicts and make them to be recognised in planning? First, communities do not seem to be as powerful as authorities and statutory consultees in demarcating potential impacts of offshore wind farms, as they are not regarded as stakeholders whose interests are somehow affected. Especially in Germany, they seemingly do not have any definatory power to point out conflicts at the beginning of the planning process, as they are not considered as statutory consultees. The only way for them to contribute to the process is by commenting on previous assessments assembled by experts and to hint at (other) conflicts at a later stage. However, the assessments and documentations that have been produced on grounds of scientific expert knowledge at earlier planning stages remain the initial basis for public participation. Such a procedure, as it is primarily applied in Germany, does not only exclude the public from earlier planning stages, it also makes the input from the public appear less objective and hardly scientifically informed which results in urging the public to rely on emotional arguments and claims-making. This leads to the divergent valuation of input from experts and alleged lay people from the public. Such a top-down understanding of the planning process also reproduces a disconnected juxtaposition and distinction of lay and expert knowledge in the decision-making process, which manifests in Germany in informing citizens and providing them with the opportunity to comment on previous expert assessments. Moreover, the validity of stakeholders' opinion is also called into question, as indicated in the following quote:

“And then the public is involved, and can actively participate by means of representations. And can apply themselves professionally (pertinently) if they think they have to do so. I say that a bit sarcastically because there are often many representations coming in which only have the impression (pretend to) to be of pertinent quality. And when you take a closer look, then you realise quite quickly that it is more personal opinions and perceptions that are described. But the valuable part of the EIA is always delivered by an expert consultant.” (*Interview, Licensing Authority, Baltic 1, 2010*)

Knowledge and evidence on which policy-making and planning usually rely need to be usable, relevant and accessible for the planning process as well as perceived to be scientifically, objectively and neutrally generated, i.e. produced without any

influence from non-scientific interests (JUNTTI et al. 2009). This ethos confronts the public with the problem to produce adequate evidence for the planning process to have some influence in the decision. So the experience-based knowledge of lay people is disjointed from scientific evidence in policy- and decision-making. And, in turn, this makes it easy for authorities to dismiss the concerns and knowledge of non-experts as irrelevant, biased and free of evidence, which is reflected in the trifling recognition of the tourist survey for the Baltic 1 case study commissioned by the tourist association which represents, unites and promotes local tourism businesses. Non-expert stakeholders are marginalised, to some extent, in the way that only a particular kind of knowledge is prioritised at certain stages of the planning process. Even more so, in Germany particular actors, like coastal residents or communities, are legally not regarded as stakeholders as their interests are not considered to be affected. The following quote also indicates the minor valuation of qualitative knowledge in the planning and decision-making process:

“They have conducted some kind of surveys, sent out and circulated some questionnaires. And then they have tried to scientifically gather this perception by means of questions, which is utterly contestable, because every question always suggests a certain answer. How it is asked is always influenced by the interviewer. The way they pose the questions leads the answer into a certain direction. It is always difficult for the researcher to ask the question in an irreproachable and unbiased way. [...] There were critical inquiries regarding such assessments, such assertions and how we deal with it. Like I said, such commissionial assessments were created in the communities. We had one which was funded by the tourism association, and Prof Benkenstein from Rostock [university] has also been concerned with this question [adverse effects on tourism due to visual impacts].” (*Interview, Licensing Authority, Baltic 1, 2010*)

However, in Germany the public can request additional assessments to be done in order to reveal or rule out issues, impacts and potential conflicts. This is one opportunity for the power of the civil society to find expression in the planning process. But such a strategy does not contribute to the divulgement of local meanings and values towards the environmental and socio-economic context and would unavoidably result in a prolonged planning process. Moreover, the decision about the necessity of additional assessments is only made by the licensing or planning authority together with the respective competent agency (*Interview, Licensing Authority, Baltic 1, 2010*). Planning authorities also regard the stalling of the decision through opponents as a common coping strategy to cover up for poor arguments and to delay the decision, as reflected in the following quote:

“This [additional assessments] is often requested. That is generic to objectors, they want this and that to be examined again, mainly in order to prolong and to torpedo the process.” (*Interview, Licensing Authority, Baltic 1, 2010*)

In contrast to the German planning methodology, in Scotland more emphasis is put on socially constructed issues that cannot be simply quantified and processed in an 'objective' way. In particular, aesthetic issues, such as the damage to the scenery and the modification of the landscape are more institutionalised through the involvement of the SNH, which provides some guidelines for addressing landscape-related questions. Nevertheless, wind farm opponents criticised SNH for not executing their full constitutional power and for being constrained by their governmental obligations.

“But the SNH, they were responsible for drawing up the guidelines about visual significance of wind farms, and the proposed wind farm contravened their guidelines. And the SNH were very quiet about the whole thing, they never came out strongly against it or for it. But of course, their funding comes from the Scottish Government.” (*Interview KWBN, 2011*)

Similarly, the more independent BUND has also been accused to be trapped between two objectives that constrain their capacity to act adequately and objectively.

“Environmental organisations sit on the fence. On the one hand, they want sustainable and alternative energy and on the other hand, they are concerned about the birds in the areas where wind farms are built. But they also need the renewables industry to meet their goals of environmental protection. They are completely caught in the middle, and they deal with it only very onerously.” (*Interview, protest group, Baltic 1*)

However, in Germany subjective issues like the modification of the land- and seascape have also been deemed as a crucial conflict and taken into account during the planning process. But the problem has merely been addressed with regard to technical aspects such as the height, colour and array of wind turbines, in order to minimise the visual impacts in the best possible way. Since the German central notion of planning for siting infrastructure facilities is oriented towards the handling and mitigation of land use conflicts, it is obvious that it is rather challenging to fully resolve aesthetic and subjective issues and reconcile interests linked to an unspoilt landscape with offshore wind farms. But this conflict-oriented understanding has also led to the conclusion that the 12nm zone of Mecklenburg-Vorpommern is not the best option for further offshore developments, as conflicts are becoming more problematic to mitigate, as indicated in the following quotes:

“I think today, they wouldn't permit any more in the 12nm zone, and would say in the EEZ” (*Interview, BUND, Baltic 1, 2011*)

“And if there are more suitable areas to be identified, which isn't predictable yet. But the tendency is rather ... regarding wind energy in coastal waters, in the 12nm zone, where you also have the visual aspect ... is not to pursue this excessively and rather to curtail.” (*Interview, Planning Agency, Baltic 1, 2011*)

In summary, the political pressure on rapid offshore developments tends to place uncertainties and ambiguity over the consideration of particular impacts and tends to privilege quantifiable conflict dimensions as decisive factors in Germany. The rejection of a few Scottish proposals based on socio-economic contemplations has demonstrated that onshore impacts are sufficiently taken into consideration (Interview, Marine Scotland, 2011). Expert knowledge is nevertheless a pivotal determinant in both countries, but only the acknowledgment and valuation of knowledge from members of the public differs, which will be advanced in the next section.

### **9.5 The emotional others? Significance of public engagement**

The major differences between German and Scottish planning policies refer to how civil society is able to participate in the planning process. The line is drawn between the notions of communication and public participation. In Germany citizens are informed about the intended development and are given the opportunity to review assessments and plans that have previously been produced by expert agencies that were consulted by the developers and planning authorities, whereas the citizens in Scotland are involved and consulted in a dialogue process. However, the conduction of assessments is subject to expert consultees in both countries, although non-expert stakeholders can initiate their own assessments, as it was done by the tourism association in Germany and by the ARC Consortium in Scotland for a socio-environmental impact study.

Despite these dissimilarities in public engagement, local residents and adjacent communities in both countries, interestingly, express their feeling that planning bypasses local communities, even though the degree of public engagement in Scotland substantially differs from the one in Germany:

“In general, in the participation process, the licensing authority decided that they will hear the community of Prerow, it is directly affected; it is located directly at the coast. That is why one day we received a huge box of many files that contained 6000 pages on which we had to comment within 4 weeks. That was impossible and I successfully applied for an extension. [...] Before that moment, there had been a lead time of three or four years we hadn't been invited to anything. We hadn't received any information, but that was the time when the political will was formed with a certain company, with particular people to establish these things. And this objective predefined by the federal state government was railroaded by the planning and licensing authorities.” (*Interview, protest group, Baltic 1, 2010*)

“There has been a consultation up to now with the strategic document and the reason why they have done that, because they don't have the staff to do this on their own. They have to throw it out to the people. We have become valuable resources, the box that needs to be ticked. I think

the process has been undemocratic, non-transparent, it is not balanced, local communities with the greater aspects, things have not been explained.” (*Interview, NTA, Argyll Array, 2011*)

The similar feeling of exclusion is perhaps accounted for by the different perceptions and expectations that local residents hold regarding the planning process (WALKER et al. 2011) or because of the lack of transparency of how the consultation information is considered. For most members of the public in Scotland and Germany it remains rather obscure how their concerns and the consultation responses are dealt with and included in the decision-making process.

“A mediation process would have meant that our concerns and arguments should have been considered more seriously. But they weren’t. They have always been warded off. They must have taken us and our problem more seriously. We and our problems should have been taken more seriously then.” (*Interview, Tourism Association, Baltic 1*)

At least in Scotland the consultation data is reflected upon and fed back to the developers to be included and considered in their application of the schemes on which the ministers make their decision.

But, indeed, planning and licensing authorities often regard communities and citizens as merely emotional stakeholders, whose concerns are lacking in factual arguments. Hence, the controversy about public engagement revolves around the gap between perceived and conceived affectedness. Members of the public may feel affected by a development differently from the way they are expected to be affected by the planners and decision-makers. But it is the policy-makers who are in the powerful position to define the affectedness of stakeholders, as reflected in the following quote:

“Who is to be involved in the spatial planning procedure is always a question of affectedness. You have to find out who can be somehow affected by a development and these people must be included.” (*Interview, planning agency, Baltic 1, 2011*)

Besides affected public bodies, and despite their legal non-affectedness, the public in terms of coastal communities has also been regarded by the planning agency in Germany as being affected by Baltic 1 because of its visibility, and communities have thus been involved in the spatial planning procedure. So stakeholder involvement in Germany seems to be bound to territorial entities in terms of the range of authorities and jurisdictions as well as the spatial relation to the project.<sup>81</sup> However, the active participation of the public was only restricted to representatives

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<sup>81</sup> See chapter on affectedness.

of the communities and excluded individual members of the public. Thus, communities are conceived as a public body (“Träger öffentlicher Belange”) and not as *the public* consisting of inhomogeneous individuals. The wider public was nevertheless allowed to review documents and to submit written statements and representations, but only qualified representatives participated in meetings and hearings. Conceiving communities as a public body eludes to the problems of generalising the manifold views of individual citizens within the public as a whole (WALKER et al. 2010). Similar to the communication procedure employed by the BSH for the developments in the EEZ (PORTMAN et al. 2009), hearings during the spatial planning procedure and licensing process in Germany are restricted to members of qualified groups, who were exclusively invited by the planning agency. These included representatives of communities, but excluded the wider public and individual citizens.

The same applied to hearings during the subsequent licensing process. Hearings provide authorities with the opportunity to explain their viewpoints and to hear and discuss the concerns of involved stakeholders. But as mirrored in the vast extension of the hearing during the licensing procedure for Baltic 1, and the strict plan applied to the hearing during the spatial planning procedure, hearings seem less useful for resolving ambiguities. They rather “tend to stereotype the issue and the actors involved, to aggravate emotions, to emphasise dissent rather than consensus and to amplify distrust rather than to generate trust” (RENN 2008:340).

In contrast to hearings as the only form of direct personal interaction between the communities, developers and decision-makers in Germany, direct public participation has been more advanced regarding the Argyll Array proposal. Various consultation events on Tiree organised by Marine Scotland and the Tiree Community served to inform the affected public about latest developments, but also to consult about views, concerns and suggestions from the community. The same purpose is attempted with the support of a liaison officer from the developer as a contact person for the community. Moreover, representatives of the Tiree community are an integral part of a steering group concerned with the project. Such an interaction fostered a mutual flow of information from which all actors can benefit. Of course the deployment of a liaison officer and the establishment of a steering group and master planning process express a particular tactic which is certainly due to the fact that the wind farm is expected to have an effect on Tiree. With such a master planning



process focusing on operational scenarios, the authorities adopted a place-based perspective, as DEVINE-WRIGHT (2011a:66) called for, to look outwards “from a given place with its inhabitants in order to find ways of ensuring a good ‘fit’ between place and technology”.

Despite these advanced participation possibilities during the planning process of the Argyll Array, the engagement of the public at early stages of planning have been widely criticised, as elucidated below:

“We were not contacted by the Crown Estate, we found this quite irritating. The first we heard about the Array was Scottish Power phoning us on a Friday afternoon, and Crown Estate would make the announcement on Monday. So it was the developer, saying we are embarrassed by this, we wanted to talk to you, the Crown Estate wouldn’t let us. But we are telling you unofficially, there is going to be a big announcement on Monday, we can’t really say what it is, but it concerns you, it concerns us and we will talk in more detail on Monday. So that is how we found out.” (*Interview, TCDT, 2011*)

This issue has arisen from the early non-consideration of the public through the Crown Estate (CEC) when having negotiated a potential lease of the site to the developer. The local communities were very surprised by the announcement that the Argyll Array site had been leased to SPR for development, as they had not been aware of this process. SPR got in touch with the Tiree community only a few days prior to the official press release, which may have shaped further expectations in the decision process (see WALKER et al. 2011) and made the community trust argue for their advanced involvement in coming planning steps. This issue was also raised at the oral evidence in front of the Scottish Affairs Committee in 2011.

Q: The Crown Estate had signed this with some big company and they [Tiree community] were just helpless bystanders off their own coast. You can understand why they are not happy.

A: We can, and it is a common problem with developments and it is the chicken and egg problem, which is when do you tell somebody and how much do you tell them and how sure are you about what you are telling them? (*House of Commons, Scottish Affairs Committee 2012:105*)

According to the CEC, the problem is grounded on the EU directive on procurement, which regulates competition. The announcement of a possible development by a particular company which competes with other companies may give competitive advantages to one company (House of Commons, Scottish Affairs Committee 2012). That is why the CEC did not recommend informing the public before a final decision about the lease of a particular territory of the seabed is made. However, this explanation does not answer the question why the CEC did not communicate their intention to lease areas of the seabed for offshore wind development to affected or

adjacent communities before negotiating with interested companies. The origin of the problem rests upon the approach and the way how sites were assigned to offshore wind developers. Similar to the immature designation process in Germany, interested companies approached the CEC and proposed sites they intended to develop. The Crown Estate was then only left with the decision to grant exclusive rights to a developer or not, as stated in the following quote:

“At that time, the specific sites had not been identified. The call to the market was, was there anybody interested in developing wind farms in this broad geographic area and, if there were, could they submit their proposals to us with some details of the specifics of the site. So the site itself would have been chosen or identified by the developer not ourselves. Of course, once we are into that process itself it is a competitive process because potentially you could have more than one developer pursuing ambitions on the same location.” (*House of Commons, Scottish Affairs Committee 2012:104*)

This organisational issue with the CEC leads to even more pervasive and political controversies in Scotland. Another reason why communities feel bypassed by the planning system is the unfair distribution of benefits from the lease of the site that also directly relates to the question of how far devolution should go. Affected coastal communities lay claim to the decisions and benefits for themselves instead of sending them to the UK treasury, as illustrated in the following quotes.

“But we would be very happy about this debate on the first issue, whether the Crown Estate should be in control of the seabed, we would be very interested to take part in that debate. [...] We think Tiree’s fishers have been fishing in these waters for over 1000 years and they should actually be in control of the seabed. Not Edinburgh and certainly not the Crown Estate and Westminster, and not Edinburgh either. It should belong to the fishermen of Tiree; it is theirs clearly by right. So if there is a discussion about taking power away from the Crown Estate, that discussion should include moving it from Edinburgh to Argyll and Bute and to the community.” (*Interview, TCDT, 2011*)

“I think the people who live around the coast of Britain should have a say in the 12 mile mark. I really think that strongly. The borders should go up 12 mile to each parish, shore, council or county. And that is where the revenue should go, all along the British coast. Those are my thoughts on that issue.” (*Interview, NTA, 2011*)

According to these respondents, public engagement from affected coastal communities should include more influence on all matters of the territorial sea in front of their parish. The involvement should not just cover a strong participation in the decision-making process, but also the repayment of revenues to the coastal communities. This could perhaps be compared to compensatory payments of which affected communities can dispose.

Principally, policies and planning regimes in both countries seem to be structured hierarchically. Planning policies and responsible authorities provide the approaches

of how stakeholders are allowed to participate and to what extent they are included in the decision-making. Such a hierarchically arranged process usually implies an “adversarial style of public inquiries, and the restless search for more consensual ways of making decisions” (OWENS 2004:111), which call for an all-embracing collaborative planning strategy. Although more collaborative strategies have been employed in the planning process of Argyll Array, particular political constraints made the public feel excluded from fundamental questions of site selection and generation of revenues. Within a top-down regime, the heterogenic public is located within particular spatial relations, as their involvement in the planning process is somehow determined by their location, but also by their contextual situatedness as defined by planning policies and their affectedness as defined at regulatory authorities’ discretion. In Scotland, the affectedness of communities is grounded on the spatial proximity to the wind farm. The planning procedure in Germany only acknowledges stakeholders who might have conflicting interests at the sea, and does not particularly appreciate the possibility of socio-economic consequences onshore.

The lack of value attached to socio-economic concerns of coastal communities in Germany is associated with the overemphasis of emotions and emotional arguments. Both the planning as well as the licensing authority reduce the concerns of the public to pure emotionally charged views, as reflected in the following quotes, which makes it easy to dismiss their arguments as irrational, as emotions “have long been portrayed as the enemy of rationality“ (FISCHER 2009:272):

“Many things are instrumentalised, in order to underpin one’s emotions that one hold against it. [...] In my opinion, this has always been grounded on an emotional perception, on non-acceptance. And then all sorts of things are sought, nature conservation, security, scenery, in order to underpin it.” (Interview, Licensing Authority, Baltic 1, 2010)

“I do remember that there have been very emotional discussions prior to the spatial planning procedure and also in the media. There were pictures and photographs that persuaded people to think that the turbines would be built right in front of the beach. [...] They collected signatures and conducted tourist surveys. Depending on how this is prepared, you can also put certain words into people’s mouth. All those things have happened. Such emotional things have happened and it has not been easy to bring it all back to a factual basis.” (Interview, Planning Agency, Baltic 1, 2011)

This problem is that a technocratic planning regime founded on factual and objective arguments does not leave much room for emotions. An attempt has been made to replace the emotional rhetoric in planning by objectivity.

“And then I’ve tried to figure out and to read what it is about. But when you are doing it; all those files with statements, representations, references and suggestions. I had to read and classify all this material and to figure out the essence. It must not be about emotions in such a

process. And so you have to look what factual arguments are included, which you have to extract. [...] So that we had a range of factual arguments, that emerged, with which we could deal.” (Interview, Planning Agency, Baltic, 2011)

The lack of consideration of what planners and decision-makers regard as emotiveness is based on non-factual and unfounded arguments that do not add any appropriate value to the planning process. The missing factual basis of such arguments makes them unreasonable and illegitimate for the planning process. Depriving emotional arguments of their legitimacy entails the risk to impute opponents from the public to misrepresent reality and their motives, which again leads to the perils of NIMBYism (see Chapter Six). But, in turn, emotional arguments can also be related back to missing procedural fairness felt by members of the public (CASS & WALKER 2009). The lack of fairness and clarity of participation opportunities may lead to mistrust in the planning system and authorities in charge. That is why an extended dialogue with affected communities can help provide transparency, acquire mutual trust and eradicate potential hostilities. Informal consultation meetings as practised by Marine Scotland and SPR provide an opportunity for the public “to air their own feelings about a situation or project” (FISCHER 2009:290). Such gatherings, in which residents can tell a story and describe their concerns, may also help planners and developers to learn about the historical context, social situation and identities, and local experiences and knowledge (FISCHER 2009) which can contribute to a sounder implementation, appearance and legitimation of the project and decision-making process. This would also fulfil the requirements of a deliberative process, through which the public is allowed to participate in the development of projects (HAGGETT 2011b), as exercised through the establishment of the steering group for Argyll Array. In particular, “collaborative planning considers knowledge to be socially situated” (HAGGETT 2011b:17), and does not solely draw on objective and factual arguments and, thus, offers an opportunity to consider more ‘emotionally driven’ concerns and stories of the lived experience (BARKLEY & KRUGER 2013). More deliberative forms of marine planning offer a different perspective on how diverse forms of knowledge come together and can be mediated than in reactive consultation processes (RITCHIE & ELLIS 2010). But yet, most conventional planning procedures do not support the incorporation of community values in the decision-making on wind farms (WOLSINK 2011). This does not mean that the Scottish gathering of information is a waste of resources and time, but it depends on what is done with this information.

As indicated in the chapter on affectedness, the scope of public engagement should be defined on grounds of the likely affectedness of members of the public, which should not be demarcated by regulatory authorities before any consultation is undertaken. The affectedness of the public should be demarcated on the basis of initial and broad public consultations, to which subsequent approaches of public participation can be attuned and adjusted. This can also help to avoid dismissing concerns as purely emotional, avoid NIMBY portrayals and address the public as an inhomogeneous mass. In this regard the Scottish efforts seem more promising in addressing concerns of the public, even though this is not how it is necessarily perceived by the Scottish communities, as they also criticise an insufficient consideration and deficient opportunities of participation. Only the contrasting juxtaposition to the German case study makes the Scottish approach appear more mature and valuable.

## **9.6 Summary**

In summary, it can be concluded that constraints and procedural shortcomings of the planning framework co-shape the communities' lack of acceptance. Those shortcomings are rooted in the novel planning domain for offshore wind farms or the transfer of existing regulatory frameworks to the offshore area, the extent to engage the public in terms of coastal communities and the technocratic regime of planning. Scottish efforts towards public engagement seem to be more appropriate than the ones applied for Baltic 1. A crucial task of Marine Scotland is to consult the public and to incorporate their interests and concerns in the decision. This is all reflected in the collaborative and deliberative strategies applied. Here, the public should be able to inform the decision and influence the material appearance of the wind farm in the end. Public engagement is driven by finding best solutions and ways to develop the project by consulting affected and interested citizens and communicating the project in a dual way. However, this collaborative planning approach might have been launched because the Tiree community seems clearly impacted by the Argyll Array, although other proposals that appear to be less contested are equally stewarded at early planning stages (e.g. Islay Offshore Wind Farm). Early planning in Scotland is also more centrally coordinated, which fosters the comparability, identification of consistent methods, exchange of assessment and monitoring results and makes pre-project level decisions more transparent.

In contrast, the German legislative framework rather allows for provision of information. The public is informed about and can comment on the project as prescribed in legislation, but this does not provide particular rights to coastal communities. Instead communities are deemed to act on emotional grounds and with a minor capability to contribute valuable knowledge to the actual planning process. The sensitivity towards the public has rather become a routinised practice in the planning process. So, public engagement in Germany seems to be more outcome-oriented and driven by legislative requirements to inform and consult the public. More influence and significance is ascribed to experts from public bodies whose jurisdiction is touched. This is particularly reflected in the diverging weighing of environmental and technical aspects against socio-economic questions during the licensing process, even if the consideration of socio-economic conflicts falls under the preceding spatial planning process. In conclusion, the power and the possibilities of certain stakeholders to participate in the planning process and to influence the decision are pre-structured by the existing and applied planning regimes.



## **CHAPTER TEN: CONCLUSIONS AND POLICY IMPLICATIONS**

This thesis has explored space-related conflicts that emerge from the siting of large offshore wind farms in Scotland and Germany. The research has demonstrated that moving wind farms offshore is far from being conflict-free and provokes a number of specific and novel conflicts. It has essentially been shown that these conflicts are constituted through conflicting interests and values that are related to socially constructed spaces and places. Thus, offshore wind farms evoke new conflicts, but conflicts are not solely about offshore wind farms. The proposed siting of wind farms only provokes the emergence of antagonistic interests related to particularly constructed spaces and places that are meant to be disrupted and changed by the presence of offshore wind farms and their externalities. Thus, it could be shown that key conflicts do not revolve around wind farms as an entity *per se*, they are grounded on the various meaningful ascriptions to the wind farms and their feared impacts on the locations in which they are sited. The ascribed characteristics and the physical presence of wind farms are constructed as being variously disruptive to the constructed ‘spaces’ in which they are placed. Hence, it is rather the various constructions of spaces and their qualities that become contested at the centre of conflicts.

This fundamental finding and other outcomes will be revisited and their contribution to current theoretical debates in the literature will be elucidated in the following concluding sections. After that, more practical conclusions will be drawn, which will be subsequently translated into a number of policy recommendations in order to highlight the real-life relevance of this research.

### **10.1 Review of findings and theoretical contributions**

The fundamental objective of this research has been to explore and explain key issues and implications that emerge from the local embedding of offshore wind farms in Scotland and Germany. The thesis presented a qualitative and comparative inquiry into the conflicts and underlying motives for and practices of opposing offshore wind farms, and the consideration of conflicting issues in the planning process, which reflect key questions of the research. Another question was concerned with the significance attached to the spatial conditions in the conflict context. Chapter Two set out the theoretical conception that combined ideas from *action-oriented geographical conflict research* and *argumentative discourse analysis* with which



space-related conflicts were addressed. Chapter Three provided an overview of the methods that were used to gain knowledge about the conflicts and revealed particularities and problems of implementing this research. While addressing the research questions set out in Chapter One, Chapter Four served to outline the hegemonic discourse that frames the establishment of offshore wind farms, and to introduce the stakeholders, their interests and action strategies as the analytical origins of pivotal conflicts over two offshore wind farm developments in Scotland and Germany. The key analytical Chapters Five to Nine revealed certain fields of interest and salient issues emerging from the two case studies. Before the findings of Chapters Five to Nine will be summarised in detail, the initial research questions presented in Chapter One will be revisited first, as follow:

***What conflicts emerge from moving wind farms offshore in Scotland and Germany and what are their underlying stimuli?***

The case studies reflected a number of different conflicts triggered by the siting of offshore wind farms, which, however, emerged in different intensities. Actual land use conflicts in terms of overlapping uses of the offshore space, such as fishing, shipping, recreational boating and military uses played only a minor role in both case studies. The prevailing conflicts in the debates over the two case studies were rather evoked by economic interests regarding tourism and environmental interests related to the conservation of the local environment. But both key conflicts do not just concern the offshore area, but essentially adjacent coastal areas whose images and qualities are threatened to be changed by the siting of the wind farms. These environmental and economic conflicts are predominantly constituted by stakeholders from the wider public, such as coastal communities and environmental organisations, while specific land use conflicts involve expert authorities. Conflicts over offshore wind farms turn out to be conflicts over ‘spaces’ and conflicts over space-related practices. However, at this point, it has to be stressed again that the delineated conflicts over tourism and environmental impacts were derived from the storylines of actors involved in the two selected case studies, and even though these issues are two common strands in wind energy controversies, other offshore wind farm case studies may have revealed other key conflicts.

***What capacity do the Scottish and German planning frameworks for offshore wind farms hold to address local conflicts?***

Both planning frameworks hold a different capacity to address conflicts over offshore wind farms. In Scotland, marine renewables as a new realm of spatial planning have been addressed by the creation of new planning instruments and procedures, whereas existing territorial planning instruments have only been shifted to the offshore area in Germany. These differences are most distinct in the pre-structured opportunities of public participation and the divergent consideration of public concerns and expert knowledge. Thus, Scottish planning regimes appear as more mature and suitable for fully addressing novel conflicts, regardless of their ultimate practical application.

***What meaning of the spatial conditions attached by conflicting actors is revealed in the conflict context?***

Spatial conditions in the course of conflicts did not appear as physical-material structures, they only become meaningful and relevant as they were perceived and constructed by certain stakeholders, in particular by the ones who opposed the wind farms. Of course, 'space' was also reified as particular pre-given physical conditions, but mostly as symbolic appropriations that are charged with purposeful meanings. Thus, spatial conditions and meanings attached to places were mostly invoked by opponents in order to justify and underpin certain arguments and storylines. A recurrent spatial imagination was the construction of spatial conditions as unspoilt and pristine nature in order to emphasise their incompatibility with industrial infrastructures of wind farms.

However, while addressing these central questions the work has also turned the focus towards a wider spectrum of related issues and notions which have not been explicitly considered in the literature dealing with wind energy and siting conflicts before. In particular, the notion of affectedness and the rationales underlying the tourism conflict are expected to add valuable insights and new perspectives to the wind farm literature. Some of the addressed issues have especially evolved from the engagement with offshore wind farms (e.g. affectedness, uncertainty), but are not deemed exclusively valuable for offshore developments and may well be taken into consideration when looking at questions about the siting of other renewable energy facilities or 'bulky' infrastructures. In turn, while being concerned with clashing interests aimed at or opposing uses of the offshore space, the research focus has also

turned towards onshore impacts of wind farms. This deviation evolved from the empirical findings and the actual real-life conflicts. Thus, this shift reflects the orientation of the existing conflicts and issues stakeholders are concerned about. These issues and contributions to theoretical debates will be summarised in the following sections.

### ***Chapter Five: Juxtaposition of conflict lines: Environment and Economy***

A crucial objective of this research was to identify conflicts that are provoked by the siting of offshore wind farms based on clashing interests and values. Chapter Five gathered and juxtaposed the major conflict lines that emerged in the two case studies. Similar conflict lines could be identified within both case studies which were predominantly shaped by environmental and economic interests that are related to the existing spatial conditions, offshore and onshore. Despite their similarity in content and manifestation, the rationalisation and underlying storylines of the two counter-discourses differ between the two case studies. Environmental conflicts over Argyll Array are framed by a potential disturbance of sharks and Great Northern Divers, whereas opposing storylines regarding Baltic 1 invoke environmental hazards from ship collisions with the wind turbines, the disturbance of porpoises and the proximity of a national park. The economic counter-discourse in both case studies revolves around economic losses in revenues from tourism caused by a feared deterrent effect of the wind farms. This argument is framed by substantial structural changes of Tiree and visual damages through Argyll Array, whereas storylines in Germany only invoke deterrent changes of the land- and seascape. However, both counter-discourses are directed to undesired changes of the spatial conditions and their implications.

### ***Chapter Six: Affectedness and a 'spatial' argument to leave NIMBYism behind again***

When dealing with the local resistance to infrastructure planning one is not able to avoid becoming confronted with the prevalence and pitfalls of NIMBYism. NIMBY is a ubiquitous concept to portray the dilemma of contested facility siting (MCAVOY 1999). This concept has also become a prolific reference in the public wind energy debate and has also been applied to make sense of local opposition to wind farms, as self-interested behaviour of people (BELL et al. 2005, 2013) and to define the spatial

range of opposition (JONES & EISER, 2009). While the existence of purely self-interested NIMBYs remains inconclusive (BELL et al. 2013), the inadequacy of the NIMBY concept to explain resistance has variously been criticised, as elucidated in detail in Chapter Six (DEVINE-WRIGHT 2005a, 2009, 2011; HAGGETT 2010a, WOLSINK 2006, 2007).

While casting a critical eye on the spatial component to the NIMBY debates in Chapter Six, this thesis added some new insights to the debate in two respects. It renewed and extended the critique of the deficiency of the concept, and also pointed out a more adequate approach to make sense of local opposition. When rigorously conceiving the meaning of spatial (physical-material) conditions in the conflict situation as socially constructed and when conceiving the constitutive elements of conflicts as space-related interests, the significance of a 'backyard' as a spatial entity becomes obsolete. Even if 'backyard' is used as a metaphorical notion, it implies that oppositional behaviour is shaped by spatial determinants. Thus, NIMBY portrayals overemphasise spatial references such as proximity and distance to the wind farm site and disregard social, political and economic interests and values. When considering space-related interests, spatial conditions should not be regarded as the determining factor and become, however, only relevant insofar as they are perceived and experienced by certain stakeholders. They only find expression through stakeholder interests in which they are embedded as constructs to which values, ideals and experiences are ascribed. Even if the visibility of wind turbines is a crucial parameter of conflicts, only the disruption of and interference with space-related interest and values can trigger oppositional activities and not the mere spatial distance to the wind farm.

In this context, the research findings indicated that affectedness is a more expedient notion for examining the origins of opposition and conflicts, than NIMBYism. It is suggested that using affectedness of actors as a basic starting point for examining the formation of opposition provides a universal basis to explain its motivational roots by asking what makes actors and places being affected by wind farm developments and how the wind farm interferes with place-related interests. But affectedness should not solely be understood as a terminological refinement and response to NIMBYism. It can be a broad and receptive starting point for questioning the origins of local opposition and for making sense of conflicts in terms of affected, disrupted and competing interests. Making use of affectedness also introduces supplementary

insights into the foundations of public engagement. Only their affectedness turns actors into stakeholders. In both case studies, admission to participate in the planning process is allocated on grounds of the affectedness of certain actors. Policy- and decision-makers in Germany tended to define the affectedness of actors by means of two contradictory principles. Authorities and experts are considered in the planning process because of their potential interest in the offshore site and their affected jurisdictions, whereas the public is excluded from greater participation because of a legal and alleged spatial non-affectedness dismissing their interests in the wind farm as NIMBYism. Coastal communities in Scotland are regarded as being generally affected by offshore wind farms, and the initial planning process serves to determine their affectedness in more detail and to negotiate mitigation measures for possible adverse effects. Of course, this understanding has even been extended due to expected onshore developments for the Argyll Array project. This leads to questions of the adequate demarcation of participation and consultation which should not be defined by geographical or administrative boundaries, but by related interests in the wind farm and in the accommodating places instead. In a first step of participation all actors who demand interests should be involved in order to determine their affectedness and to ensure to include all views, favourable and critical, on wind farms (see BISBEE 2004:283). A more relational understanding of space (JAY 2012b), as the basis of public engagement in offshore developments can help to avoid the pitfalls of simply translating the functionality of the territorial planning framework grounded on politically constructed spatial territories to the marine area.

### ***Chapter Seven: The missing rationalities of the resurgent tourism conflict***

Within the Chapters One and Seven it has been stated that existing literature explicitly and implicitly points towards the persistent conflict between onshore and offshore wind farms and tourism (TOKE 2005; KEMPTON et al. 2005) that is unilaterally produced by opponents who fear adverse effects on tourism because of the visual intrusion and the deterrent effect of wind turbines. However, there has been a gap identified between evidence and fears, as most quantitative surveys (FIRESTONE et al. 2009; LILLEY et al. 2010; FRANTÁL & KUNC, 2011) do not give a clear indication that wind farms may deter tourists or that tourists feel deterred by wind turbines. Despite this missing evidence opponents keep stressing fears about potential impacts on tourism as their major concerns and motivations for fending off wind farm developments. The loss in prosperity gained from tourism revenues turned

out to be the most prominent concern of the coastal communities in both case studies. Due to deficient real-life evidence from existing offshore wind farms and the particularities of each local setting, the impact on tourism cannot be fully ruled out by decision-makers either. The dispute over tourism impacts is thus rather characterised by a lack of knowledge at both ends of the conflict. This gap between missing evidence of impacts and existing fears endures due to ambiguous case-specific causalities between wind farms and tourism impacts, which do not lend credence and substance to any of the two arguments. The storylines through which opponents make sense of potential adverse impacts have shown that opponents do not only rationalise tourist impacts with the visual deterrence, but that wind farms are also meant to interfere with tourist activities and disrupt the environmental foundations of tourism.<sup>82</sup> Most storylines have demonstrated that local opponents rationalise their arguments with expertise about the local economic and cultural context, even if the ultimate impacts are to be determined over time. Thus, opponents rather act as place-protectors who try to defend the value and significance they attach to a place, and their personal experiences with the place (DEVINE-WRIGHT 2009a, 2011; BELL et al. 2013). The development of a wind farm does not just change the visual appreciation of the landscape, but imposes also economic risks on their livelihood by compromising the naturally given and economically utilized assets of the coastal landscape that constitute the foundation for tourism. Moreover, a deeper consideration of rationalities that substantiate and specify the conflicting interaction of offshore wind farming with coastal tourism has again illustrated the (self-referential) affectedness of coastal communities.

### ***Chapter Eight: The manifestations of the inner-ecological conflict***

An immanent problem of the siting of wind farms is that they indicate both interests of landscape conservation which are threatened by tangible local impacts of wind turbines, and interests towards global, imperceptible and intractable benefits of mitigating climate change (PEPERMANS & LOOTS 2013). With regard to wind farms, this phenomenon has been framed as inner-ecological conflict (BYZIO et al. 2005) or ‘green on green’ controversy (WARREN et al. 2005), pointing to the fact that ecological arguments can be stressed either against and or in favour of wind farms. However, the rare literature considering this phenomenon rather points to the

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<sup>82</sup> The identified storylines (see Chapter Seven) that constitute the tourism conflict should not be considered as definite. There are certainly more and other case-specific reasonings of how wind turbines may interfere with tourism.

existence of an inner-ecological conflict, without explicitly examining its underlying rationales as well as its manifestation and characterisation at the local level.

This inner-ecological conflict also came into the picture during the planning processes of Argyll Array and Baltic 1, and Chapter Eight sought to explore its constructedness and appearance within the two case studies. After having described the underlying storylines of environmental conflicts over the two offshore wind farms, Chapter Eight argued that the inner-ecological conflict does not only present a problem for environmental organisations, but also for planning and licensing authorities, which have to negotiate and weigh targets in climate protection against local environmental impacts. In this context it has been shown that the emphasis of storylines about climate change as advocating voices for offshore wind farms are missing in both case studies. In contrast to the hegemonic discourse which is clearly framed by climate change arguments, references to climate change are generally absent in the local planning debates over offshore wind farms which predominantly concentrate on assessing and quantifying environmental impacts of wind turbines. It was shown that decision-makers rely on the knowledge of consulted experts while mostly dismissing lay knowledge from the public. Therefore, the definatory power over environmental issues and the demarcation of conflicts lies with expert agencies. In this chapter I concluded that the inner-ecological conflict is addressed by identifying most appropriate sites and best practices to build offshore wind farms.

### ***Chapter Nine: Pre-structured power of stakeholders***

Another recurring and inconclusive theme in wind farm literature is the power relations in local wind energy politics and the potency of local opponents in the planning process. The opposition from local stakeholders is widely thought to be an effective obstacle to wind power developments, as they are able to prevent or delay their successful construction (e.g. BREUKERS & WOLSINK 2007; JONES & EISER 2010, BELL et al. 2013). In contrast, AITKEN et al. (2008) challenge the power of local objectors and their capability to decisively influence the planning outcome. Chapter Nine compared and evaluated the implementation of the planning and public participation processes in Germany and Scotland and illustrated that the Scottish planning regimes appear to be more mature and better geared to handle novel issues of offshore wind farm planning, whereas the respective German planning framework within territorial waters is borrowed from territorial infrastructure planning.

The powerful position of local communities may well apply to the planning of onshore wind farms, whereas host communities are designated participants in the planning process. But, as argued in Chapter Five, the two case studies suggest that effective power is rather pre-structured through the planning and public participation processes. Dropped offshore wind farm plans off Kintyre, in Solway Firth and Wigtown Bay in Scotland have evidenced that a vociferous and well-organised opposition from members of the public can influence the prevention of projects. But this effect is only as powerful as it is being empowered by the decision-makers in the planning process. The Scottish Government could also just have ignored and downplayed the protests against these applications which would have made them less influential. Only because Marine Scotland took the quantity of protests very seriously, the opposition turned out to be successful and can now be regarded as powerful. In a similar way, the activities of the Tiree Trust can also be regarded as influential since it was heard at various consultation meetings and the Community Trust was granted permission to participate in and co-determine the master planning process. In contrast, the influence of local communities in Germany turned out to be less powerful in preventing Baltic 1 as they were considered as jurisdictionally unaffected, which resulted in the denial of exceptional legal rights and constrained their participation opportunities to standard procedures. Other stakeholders, such as environmental organisations and statutory consultees, are endowed with more practical power to influence the wind farm application. Therefore, it is argued that the power of certain actors is only as strong as it is conceded by the decision-makers, in terms of spatialised or spatially allocated power. The powerful or less influential actions of objectors are always reflections and reproductions of the structural conditions within which they are exercised.

### ***Theoretical framework revisited***

This research drew on and utilised two theoretical concepts that helped to understand and frame space-related conflicts, and to analyse them. *Action-oriented geographical conflict research* as outlined by REUBER (1999, 2000), was deemed as exceptionally useful to conceptualise space-related conflicts by means of clashing interests (siting of wind farms vs. opposing interests) which only include social representations of 'space' as a reference of conflicting actions. Such a concept dismisses any version of substantial and effective space as the cause of conflicts and is based on social constructivism. Here, space becomes only relevant as construct in a certain context of action, such as conflict situations, and the analytical starting point are various



physical and symbolical conflicting practices. Hence, such a concept also understands conflicts as social constructs, which only occur through antagonistic human interests and actions. In general, the principles provided by the framework turned out to be very useful for the consideration of conflicts over offshore wind farms too. While this research was guided by the trialectic elements of individual interests and goals as well as various references to physical-material and structural conditions, valuable statements could be made about the underlying motives, the formation and institutional consideration of particular conflicts.

Another objective of this research was to uncover the conflict interactions by examining the connection between space-related interests and meanings of conflicting issues. Therefore, the action-oriented fundament was advanced by and combined with an *argumentative discourse analytical* frame according to HAJER (1995). By doing a discourse analysis, the research was also capable of venturing beyond conflicting practices and turning the attention to the construction of meaning and reality. The focus was here to understand the different perceptions of what conflicting issues over offshore wind farms are and how they are defined. The goal was to identify argumentative structures and patterns of how various actors make sense of and rationalise conflicts over offshore wind farms. A tool to identify these structures is the idea of storylines. The focus on storylines, as condensed and generalised narratives, was particularly helpful to collect and synthesise broader argumentative structures of the involved actors and to dissect the mesh of argumentative patterns. This was particularly useful for the deconstruction of the *hitherto* quantitatively approached tourism conflict. Storylines are used to depict recurrent discursive structures across the two case studies which culminated in the identification and construction of the two key counter-discourses and the deconstruction of the hegemonic discourse. However, the applied discourse analytical approach contrasts with a more linguistic and semantic micro-analysis of discourses.

However, although the application of this theoretical framework proved to be purposeful to address the research objectives, it also revealed some methodological shortcomings. When reconsidering the threefold subjectivisation of spatial conditions in a conflict context and the notion of strategic geographical imaginations, as suggested by REUBER (1999) (see section 2.3.3), it turned out to be hardly practical to separate the different levels during the research process. REUBER (2000) argues

that the imagined geographies can be distorted as strategic geographical imaginations and biased means in order to enforce personal interests, but there is no indication as to how the levels can be distinguished and on what grounds they can be identified. So, such purposeful instruments of manipulation as emerging from selective perceptions and space-related preferences entail an epistemological pitfall. If there are strategic, and thus purposefully produced, distortions of spatial conditions, there must also be an undistorted and objective benchmark to which the distortions refer. But if starting from the social constructionist premise that 'space' is not objectively perceivable and experienceable, and only a relational and classificatory construct (WERLEN 1997), then it is barely possible to determine the distortion of spatial structures and references. A 'tourism space' or 'natural environment' is related to particular interests and therefore argumentatively constructed by opponents, but it is hardly possible to demarcate such constructions as active distortions that deviate from an undistorted reference point. A distorted version of spatial realities may only be detectable in relation to the ones produced by other actors, which are supposed to be discredited by their own strategic geographical imaginations.<sup>83</sup> That is why distinct strategic imaginations could not be identified, other than argumentative instrumentalizations of the socio-spatial conditions. But this does not imply that other space-related conflicts beyond the siting of bulky infrastructures do not reveal strategic geographical imaginations either. The framework and the methodological approach can certainly be adjusted and directed to the identification of strategic geographical imaginations, if this is the research focus, as proven by HAMHABER (2003).

As mentioned before, one of the strengths of the conceptual framework is its relative openness and flexibility towards manifold methodological approaches, depending on respective research objectives. So, the weighting of particular aspects such as subjective interests, goals and values or the spatial dimension can be varied without missing out on the holistic picture of conflicts and their context. All constitutive levels of space-related conflicts are deemed equally important in shaping conflicts, but an equal consideration of all theoretical aspects proved to be difficult in research-practical terms. It seems hardly possible to provide a nuanced and detailed analysis

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<sup>83</sup> But this thought also raises questions about power relations and definatory power over spatial realities. The question is who defines what spatial reality is accepted as 'true' and becomes the dominant understanding. This further suggests that actively distorted understandings of spatial realities are always counter-constructions produced by less powerful actors and the spatial references are produced within the hegemonic discourses.

of conflicts that reveals and describes the dynamic interplay of all factors, levels and actors in its entirety. Nevertheless, the combination of the individual and structural level can be seen as an asset of the framework, but the tendency to address conflicts from an individual practice-related perspective may neglect institutional, inter-subjective and discursive aspects of conflicts. Another drawback could be the conceptualisation of power in this concept, which only makes use of a *Weberian* understanding of power as allocative and authoritative resources (GIDDENS 1984) that can be possessed. Since conflicts are understood as dynamic processes instead of static and antagonistic entities, other more relational concepts of power (ALLEN 2003) could provide new insights in particular conflict contexts. Despite these shortcomings, and due to its flexibility and extensibility the framework may well be applied to the investigation of a wide range of conflicts, other than typical land use and siting conflicts that are less obviously hallmarked by spatial references.

In summary, the purpose of the theory of space-related conflicts framing this research was to explain how a certain phenomenon is conceptualised and addressed. Theory served to illuminate how the research object of spatial conflicts is understood, described and analysed. Imbuing this research with social constructionist premises fundamentally led to the reconceptualization of spatial conflicts as space-related conflicts.

The theoretical lens of space-related conflicts based on various clashing interests and the awareness of the constructedness of 'space' turned out to be very valuable for drawing the following theoretical conclusions that are supposed to open up a new perspective on siting conflicts.

### ***From conflicts over 'wind farms' to conflicts over 'spaces' and 'space-related practices'***

A not immediately obvious but yet overarching finding is that not the wind farms *per se* are contested, instead the key conflicts revolve around the variously constructed spaces that host the wind farms. This does not mean that some dubious efficacy of space causes conflicts (LOSSAU 2007). The discourse analysis of conflicting arguments has shown that counter-arguments refer to wind farms as industrial infrastructures that are incompatible with particularly conceived spaces and their traditional uses. In turn, spaces are often constructed in a way which makes them appear irreconcilable with wind farms. So, the analysis of conflicting arguments

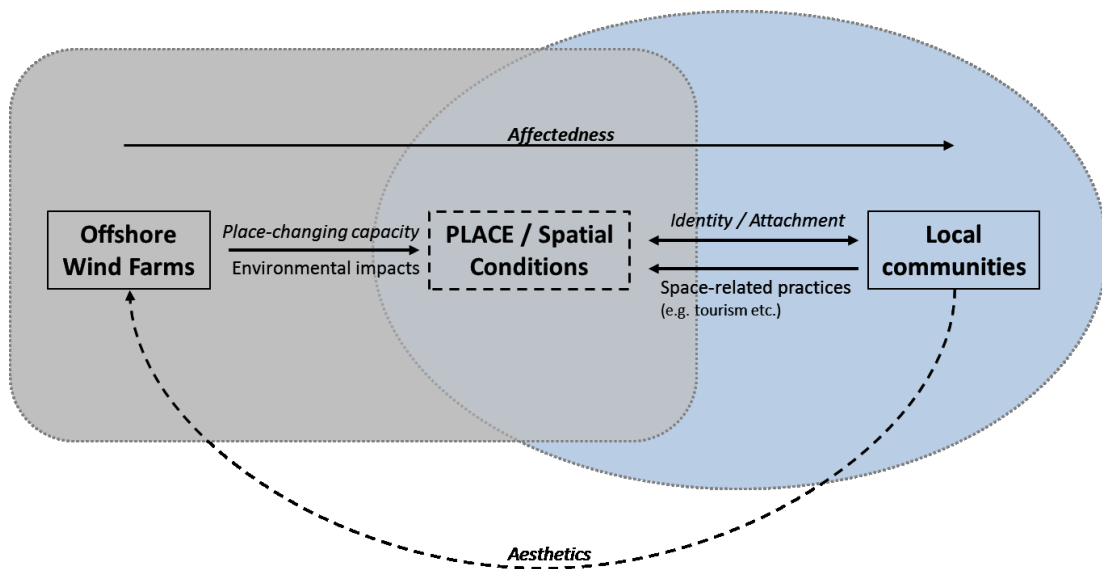
demonstrated that key conflicts involve spatial conditions as a central focus of contestation. Some scholars have already given some indication that siting and land use conflicts are not necessarily about the actual resource or use, but often about the space in which the siting of infrastructure projects is proposed, due to overlapping land uses and rights (VAN DER HORST & VERMEYLEN 2012), and resulting spatial changes (DEVINE-WRIGHT 2009a; PASQUALETTI 2011a; NADAI & VAN DER HORST 2010a). This present research has however demonstrated that conflicts over offshore wind farms cannot simply be defined as land use conflicts in strict terms, as concerns related to indirect implications, unknown repercussions and changes of adjacent onshore areas outweigh clashing uses of the offshore space.

Nevertheless, these previous elaborations indicate that the motive for opposition cannot exclusively be found in an alleged harmful nature of wind turbines, but in the large-scale changes of spatial conditions they are feared to entail. Of course, the change is provoked by the siting of offshore wind farms, but the meaning and purpose of wind farms has hardly ever been contested as compared to their incompatibility and inappropriateness with spatial conditions. So, offshore wind farms *per se* are not questioned by opponents, but the changes and uncertain cultural, economic and environmental implications they may bring to particularly meaningful locations. Only at later stages, when the projects progressed, opponents turned their attention to the contestation and questioning of wind farms and wind energy *per se*. Therefore, I argue that *conflicts are induced by the perceived place-shaping capacity of wind farms, but they revolve around the implications of spatial changes*. Consequently, as the results of this research suggest, the origins of conflicts must be sought in the various meaningful constructed spaces and space-related practices that are meant to be incompatible with and feared to be disrupted by a wind farm, rather than in the wind farm itself. So, the conflicts are essentially about the spaces that are at risk to be spatially, visually, physically, economically and culturally transformed by the siting of wind farms. It is the interests that are linked with and aimed at these spaces and the experiences, traditions and practices that are associated with these spaces, which are feared to be altered, disrupted or displaced. Different space-related practices, such as tourism and nature conservation clash with the emerging land uses (VAN DER HORST & VERMEYLEN 2012) such as offshore wind farming. This adds to and chimes with the findings of previous studies (GROSS 2007, WOLSINK 2007b), which point to the fact that not the appearance of wind turbines should be considered

as the sole bone of contention, but the way how wind farm developments are proposed and handled during the planning process.

When broadly following CRESSWELL (2004), WERLEN (1997) and DEVINE-WRIGHT (2009a), in order to understand places and spaces as entities whose meanings are not inherent in their physical characteristics, but attributed and constructed by humans and closely linked to identity, belonging and the practices that bring them about, the examination of conflicts over facility sitings should not be focussed on the facility as the only object of conflicts. This research has given some indication of constructed and appropriated spatial conditions, such as tourism spaces, unspoilt and flat landscapes or unique natural areas, about which people are concerned. The change and disruptions of those areas may be also threatened by other developments, other than the widely expected visual damages through wind farms which are meant to stick out of and dominate the landscape. In order to fully understand the conflict context, experiences, perceptions, values, and uses that inform and produce the ties between actors and spaces through space-related practices must be taken into account, which has been similarly called for by DEVINE-WRIGHT (2009a). Although being based on the same epistemological grounding and complementing each other, the notion of space-related practices deviates from the idea of place attachment as it does not predominantly address personal identity as well as emotional and psychological bonds with places, as reiterated by LEWICKA (2011). It rather stresses the manifold practices through which spaces are variously constructed and appropriated, but which can also be jeopardised through changes. A common feature is however that opposition can be re-conceived as protective action. This becomes even more apparent when the space-related qualities and spatial conditions are conceived as a fragile economic foundation of coastal residents.

As figure 15 illustrates, the ultimate principle is that there is no direct impact-driven relationship between offshore wind farms and people. The affectedness of people is indirectly produced through the interpreted place-changing capacity of wind farms and the expected changes of the spatial conditions. Only the perceived changes of spatial conditions impinge on and disrupt space-related practices and ascriptions, and thus affect people, make them oppose offshore wind farms and induce conflicts. Individual and subjective aesthetic perceptions of wind turbines may produce the only direct link between the wind farms and opponents.



**Figure 15: Interrelationship between offshore wind farms, space and local people in conflicts.**

Such a modification of perspective suggests that it is not only the actual planning object at stake which is contested; it is the spatialised setting that becomes contested instead. The wind farms rather appear as the artefact that triggers conflicts due to their space-transforming efficacy which catalyse change, as any other undesired development that may threaten the *status quo*. Key conflicts in both case studies were about the uncertain impacts on the sea- and landscape and their feared implications, and not about the wind farms. The modifications and disruptions of the appearance of the valued spatial conditions and its natural and cultural conditions due to the efficacies of wind turbines to interfere with space-related practices are at stake.

However, the question of whether offshore wind farms should be considered as the cause of conflict or not, can only be determined by comparing the protests and conflicts with those emerging from the siting of other offshore renewables, such as wave or tidal facilities. On the one hand, this argument is somewhat supported by a few hints from interviewees that those facilities were preferred over offshore wind farms due to their less intrusive visual appearance. But on the other hand, this is disputed by the general trend to move wind farms offshore as they are deemed to be visually less obtrusive than onshore wind farms closer to communities. But this can only be proven once wave and tidal developments are proposed in similar locations. In a nutshell, the case studies of this research have however indicated that the

conflicts are about feared and expected changes of spaces and their socio-economic implications.

### ***Geographies in 'mind': The dual meaning of 'space' in the conflict context***

The space-oriented perspective of the thesis intended to uncover how spatial structures become variously important in the conflict context in order to add further knowledge to the understanding of the “motivations of participants, the representations and arguments [as well as] the complex negotiation of discourses of nature, landscape, environment and rurality which frame collective and individual actions” (WOODS 2003:287). Therefore, the thesis has been grounded on the constructionist premise that space is not *a priori* relevant through its physical existence, but through its various meaningful ascriptions. As elucidated throughout the thesis, spatial representations in conflict situations exhibit constitutive and instrumental functions. Firstly, as explained in the previous section, variously appropriated spaces are the objects of contestation in the conflict context over offshore wind farms. Different manifestations of physical-material conditions, such as constructs of pristine nature, natural landscape, or unspoilt scenery etc., have become reified objects at which space-related interests of coastal tourism and nature conservation are directed. ‘Space’ is pervaded with everyday practices, perceptions and valuations. It is the subjective perceptions, constructions and representations that bear a relation to oppositional actions. But the spatial or physical-material conditions in the conflict context become secondly also meaningful in another way. In particular, the conflicts with coastal communities are variously entangled with the social construction of spatial conditions. Imminent disruptions of particular imaginations of the socio-spatial conditions, of the ‘geographies in mind’, such as a prosperous tourist region, an economically fragile peninsula or a traditional Scottish island, are at the centre of conflicts. Those representations of the meanings and values ascribed to spatial conditions are not just the basis on which arguments of opponents are grounded; they are also invoked as arguments to enforce interests. In particular the terms landscape and nature are laden with specific meanings to underpin the argument that an industrial wind farm does not fit into the given setting, as it would counteract and disrupt the meanings and denotations attached to the physical-material conditions.

As opposed to the euphemistic spatial constructions of opponents, the physical-material conditions are also instrumentalised by advocates of wind energy. The national wind energy discourse in Scotland is grounded on the emphasis of physical geographical conditions that are predestined to be exploited by wind energy. In contrast, the same spatial conditions are reframed by opponents as invaluable resources for tourism. So there are two argumentative constructions of the spatial conditions that are positioned opposite to each other.

In that sense, such ‘geographical imaginations’ (GREGORY 1994) are also an argumentative element, a medium to present and corroborate certain attitudes and interests and to exclude others. ‘Space’ becomes an argument and means of oppositional practice. In summary, as argued by REUBER (1999, 2000), spatial conditions hold a two-fold meaning in conflicts. Firstly, they are the constructed object of conflicts at which certain interests are aimed, and secondly they become meaningful as a constructed argumentative medium to underpin and enforce interests. The latter meaning could be proved in both case studies as spatial conditions were argumentatively referred to as natural, flat and unspoilt areas predestined for the tourism economy and unsuitable for hosting wind farms.

### ***Scale and scopes of conflicts***

The conflicts over wind farms touch upon and permeate through different scales: administrative, geographical as well as thematic scales. Thus, it is problematic to make reliable statements about the scope of this phenomenon, which depends on the demarcation of each conflict dimension. As it has been indicated throughout the thesis, various conflicting interests emanating from various geographical and administrative scales meet at the local level. Therefore, the classic environment-economy conflict paradigm that points to green ecological goals set against economic development and market interests (NADAĪ & VAN DER HORST 2010b) is only partially applicable to renewables. Conflicts over offshore wind farms rather reflect a diversification of contrary interests that include economic, environmental and political strands. The disputes over offshore wind farms involve local economic interests of tourism that clash with national interests of an ecological modernisation of the energy sector, which both claim to have a vital effect on the labour market. The local level is also confronted with the inner-ecological conflict between local nature conservation and the national and international agreements of tackling climate



change by reducing carbon emission (WARREN et al. 2005; BYZIO et al. 2005). The case studies have demonstrated that it is the environmental organisations and decision-making authorities that have to cope particularly with the inner-ecological conflict, whereas coastal communities tend to utilize nature conservation for their own benefits.

In this respect, scale does not only refer to the thematic direction of conflict lines, but it also concerns the range of actions of involved stakeholders. The debate over Argyll Array has been brought to the national scale in Scotland. This is because of the centralised planning regimes, but also because of the involvement of local opponents in national protest groups and their application of new media, such as weblogs, to spread their ideas, opinions and concerns, and to seek broader support for their campaigns. In contrast, the disputes over Baltic 1 remained at a regional level, as decision-makers were anchored in their limited administrative scope, and so was the opposition group since they transformed themselves into a regional political party. In hindsight, the formation of the voting bloc “Save Prerew” does not only reflect the wide concerns among the local population towards the wind farm project, but can also be seen as an “critique of the policy on the one hand and resistance to its localised manifestations on the other” (OWENS 2004:110).

## **10.2 Practical implications**

Beyond the theoretical contributions of this research, there are also some practical lessons that can be learnt from the realities in the two case studies.

### ***Key issues over offshore wind farms***

The key issues over offshore wind farms that are represented in both empirical studies, such as visual damage of landscape, disturbance of birds and consequences for the local economy, replicate matters that have been widely discussed in the context of onshore wind farms. But there is also a number of novel issues that are specific to the marine environment, such as the hazards of ship accidents, the damage of the seabed, noise nuisance of marine mammals, the interferences with larger migratory patterns of marine mammals and seabirds as well as the interference of public sea-based activities of fishing and water sports, some of which cannot easily be apprehended as land use conflicts. Other common issues like noise emissions and flickering have become less relevant to offshore wind farms.

All those issues converge in two central and recurring conflict dimensions, i.e. economy and ecology. These issues are very similar to the ones that occur when wind farms are to be sited onshore, even if the underlying storylines and factual arguments vary (HAGGETT 2008). Direct and indirect effects of offshore wind farms can evoke adverse conditions for the surrounding environment and economic consequences for adjacent coastal areas. Of course, offshore wind farms may also cause boosts within particular economic sectors, but these rather supporting arguments are set against economic impacts. Adverse economic effects in both case studies crystallised in the form of effects on the local tourism industries. The tourism conflict is characterised by a gap between the institutional evaluations of tourism impacts and the fears of opponents. Given the status and relative importance of tourism within the local economy of Tiree and the Darß peninsula, the wind farms provoke existential fears concerning a loss of economic security of many residents and may induce far-reaching cultural and social changes. The ecological conflict line in the form of the inner-ecological conflict revolves around the local environmental impacts and the compatibility of the wind farms with the environmental setting. Impacts on marine mammals, birds and the adjacent protected areas and the interference with still undesignated protected habitats are the recurring storylines that characterise this conflict line. The environmental compatibility of a wind farm is strongly connected with the location and the construction methods of the wind farm. The inner-ecological conflict is more institutionalised than the tourism conflict due to the required expert knowledge on involved issues and is therefore informed by and fought out between only a few particular stakeholders (see Chapters Seven and Eight).

However, when reversing the perspective from impacts of offshore wind farms to the vulnerability of the environmental and socio-economic settings on which wind turbines impinge, the question could be asked about how susceptible a setting would be and to what extent the establishment of a wind farm may alter the conditions. Evaluating the vulnerability of the existing conditions and the resilience of the socio-economic coastal system could give some further indication of the efficacies of a wind farm, beyond the pure impact assessment, and could also address the all-pervading and conflict-inducing uncertainty associated with a relatively new planning object in a largely unknown area of planning.

Dealing with offshore wind farms as a novel object of planning itself as well as the new terrain of planning turned out to be an essential issue too. Unknown planning terrains and immature planning procedures reflected the inconsistencies that planners and decision-makers had to face in both case studies. In particular, the temporal intersection of the selection of particular wind farms sites, the designation of priority areas and protected areas presented a problem of coordination for authorities, which additionally increased uncertainty (see sections 9.2.1 and 9.3).

### ***The nature of objections***

The motives for objecting the two wind farms cannot be narrowed down to a single cause. The nature of objections to offshore wind developments is a combination of structural constraints and individual interests, concerns which cannot be easily separated. A holistic picture of conflicts has shown that the motivations of key objectors, such as environmental groups or local residents, are mostly embedded in particular interests and related to shortcomings of the regulatory framework. The arguments of objectors mostly refer to an interlaced amalgamation of disturbed interests and deficient planning procedures, whereby one can complement the other to enforce the overall argument. In particular, the concentration on technical flaws in applied procedures and assessments offers a more promising way for opponents to refute the legitimization of the project and to disguise or supplement less tangible personal concerns. The engagement with space-reflected conflicts has shown that the oppositional stimuli are subject to a number of different perceptions, interests, values and structural conditions and not self-interested ‘backyard’ motives. The still existing portrayals of NIMBYs in the public discourse in the context of contested facility sitings have once more proved to be misrepresentative, delusive and only advantageous to powerful actors in undermining opposing rationales.

### ***The nature of the planning process***

The two orientations of objections are informed by two central but diverging conflict discourses that essentially shape the ways of dealing with conflicts. First, real life conflicts are mainly anthropocentric, by which opponents from the public are primarily concerned about social and economic impacts and repercussions of offshore wind farms. Environment-related interests are often purposefully deployed to reinforce social and economic interests, as reflected in the NTA’s exploitation of Basking Sharks and Great Northern Divers as an asset of Tiree’s environment or in

the repercussion of environmental hazards from ship accidents on tourism.<sup>84</sup> The second and contrasting discourse informs the practices of decision-makers as well as the nature of the planning approaches. A techno-centric and eco-centric planning process overemphasises environmental impacts and technical mitigation measures upon indirect and uncertain socio-economic impacts. Such technical matters can easily be quantified and backed by expert assessments whereas the heterogeneity of public and local concerns is overlooked when solely drawing on expert knowledge. But those environmental and technical aspects are likewise pervaded by a certain level of uncertainty. Those two parallel discourses seem to be more consolidated in Germany than in Scotland where both strands are more institutionally intertwined. A clear separation between valuable expert knowledge and emotional lay people constituted and maintained by decision-makers could be identified within the Baltic 1 case study. Decision-makers from Marine Scotland do not principally differentiate between the affected public and experts of particularly affected fields and regard inputs from both as equally beneficial for a sound planning process. The powerful role of policy-makers and decision-makers in shaping the planning process should therefore be critically considered and utilised in order to create a more transparent, consensual and legitimate decision in the end. Even if it is a new system, the Scottish planning procedure appears to be more democratically mature and advanced by making use of deliberative methods of participation. However, the practical application of these advancements and the actual effect of public participation still need to be proven and will only be verifiable through the physical appearance of the wind farm.

### ***Stakeholder opposition***

The theoretical notion of affectedness also offers some practical adjustments. When using the potential affectedness of actors as a starting point in planning, opposition can be reframed as 'stakeholder opposition'. Only a personal or institutional affectedness turns actors into stakeholders. Determining the affectedness of all potential stakeholders in an early phase of planning could guarantee a sounder, more transparent and more legitimate decision-making process. As reiterated before, affectedness should not be primarily determined by administrative jurisdictions or spatial allocations, but by space-related interests. This implies that affected and disrupted space-related interests and values as well as space-related knowledge

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<sup>84</sup> In contrast to such a reasoning from the protest groups, environmental organisations stress environmental impacts for the sole sake of the environment.

should be utilised as the key criteria for determining affectedness and the identification of stakeholders. Such an determination of stakeholders was partially undertaken by Marine Scotland when it initiated the first consultation round on the Draft Plan for Offshore Wind Energy in Scottish Territorial Waters (see Chapter Nine).

### ***Implications of an absent climate change discourse***

Offshore wind energy is meant to replace conventional carbon-intense forms of energy production and is thus seen as a vital element of energy transition, and the decarbonisation of the energy sector as a response to climate change. However, exactly these credentials of offshore wind farms are basically absent within the debates and conflicts over their establishment at the local level. All involved actors in both case studies do not explicitly refer to climate change or take it implicitly for granted when negotiating wind farms in the planning process. Opponents and decision-makers define wind farms merely on the basis of their appearance and adverse local effects. While it is hardly surprising that opponents who are concerned about local impacts avoid acknowledging the aims of wind farms, it is not idiosyncratic that planners do not accentuate the tie between wind energy and climate change either. Planners and decision-makers concerned with the implementation of wind energy at the local level equate wind farms with any other planning object to ensure transparency and objectivity, even though this has been doubted by opponents. Moreover, wind energy may no longer be seen as an alternative form of energy and may have already been internalised as a conventional energy source in the public understanding. Advocating voices at the local level may be missing as the widely recognised credentials of wind energy do not need to be highlighted anymore. But therefore the attention focuses more on its less known adverse effects instead, which are relevant to entrench them on large scale at the local level in a widely unknown marine environment.

The neglect of a climate change discourse or discussion of the global purpose of wind turbines may entail counter-productive effects, as reflected by some oppositional activities. At first, this may lead to a partial and one-sided reflection upon local environmental impacts within the inner-ecological conflict without balancing them against their global merits. Secondly, and more severely, the absence of climate change storylines may be self-defeating and the wind energy discourse may lose its credibility through oppositional forces that fill this gap and manipulate

and question climate change and thus the use of wind energy. Some stakeholders, as evidenced by arguments of CATS, NTA and the Don Quichotte action group question the need of renewables by expressing doubts about climate change (CATS) and by pointing out alternatives to current wind energy strategies (NTA, Don Quichotte, KWBN). However, an even more influential cause of such tendencies towards anti-renewables, anti-wind and climate change denial rhetorics is the non-consideration and dismissal of subjective concerns of opponents. As their arguments are dismissed and disqualified as emotional, irrational and unquantifiable, opponents tend to turn their argumentative patterns towards a more tangible reasoning and challenge the need of offshore wind energy as well as question the substance and rightfulness of national strategies. It is therefore argued that opposition groups, sooner or later, get themselves entangled in the broader debates about wind energy, if they feel that their locally embedded concerns are not sufficiently acknowledged, as it was done by the No Tiree Array group between 2011 and 2012.

### ***Role of public participation***

The dynamics of participation are a fundamental component of the planning process that co-shape the power relations within the conflict context by conceding influence to particular actors. Stakeholders are only able to actively contribute to the decision when participating in the planning process. Only the granted possibility to participate in the planning process allows them to become stakeholders in a legal sense. However, while the participation of experts is equally desired in Germany and Scotland, the characteristics of public participation vary significantly in terms of best practice. When revisiting the thoughts on a comparative analysis stated in the introduction, it can be said that opposition occurred in both case studies, but only thanks to the comparative perspective it can also be concluded that the Scottish planning schemes exert more viable and advanced approaches of deliberative public engagement to capture the origins of opposition. The Scottish approach to public participation appears to be more expedient and methodologically sounder than the German one, as it makes use of collaborative methods which are more capable of capturing and negotiating public concerns than just informing the public about the developments. The current approach regarding the Argyll Array comprises repeated consultations on Tiree to capture views and feedback and to inform the local public about the progress. The local council is also involved in a steering group that is concerned with the master planning process through which operational strategies that directly affect the people on Tiree are deliberated. But the Tiree community had to

claim their exceptional rights in early planning stages after they had been bypassed by the Crown Estate in the first place. Thus, the local public and experts are equally represented in the participation process, even if some citizens dissociated themselves from the activities of the council to combat the Argyll Array more fundamentally.

The approach applied in the planning of Baltic 1 included only standardised participatory instruments. While a number of experts and affected authorities were invited to provide feedback based on their expertise, the public was only informed about the project and allowed to comment on previously conducted assessments. So this approach, from an administrative point of view, appears to be comparable to what BURNINGHAM (2000) frames as ‘announce and defend’ rationale, by which the acceptance of fairly advanced projects is only requested at later stages, which tends to defend the project against any objections from the public that was excluded from early planning. Therefore, Baltic 1 had to be adjusted afterwards to align the wind farm with the raised concerns.

One reason for the difference in public participation may be detected in the new field of planning. While Scottish marine planning was newly created and adjusted to rising spatial demands, such as marine renewables, by establishing the Marine Scotland Act, the German approach to marine planning in the territorial waters entailed a transfer of terrestrial planning instruments to the marine area. Using conventional methods for unknown terrains of planning may overlook the particularities of the new field and may be limited in fully understanding the whole context. Of course, this may also apply to the *modus operandi* of public participation. Even if the factual planning of Argyll Array is still to be decided, the applied instruments testify a greater influence of affected third parties in the final decision and the ultimate material and operational appearance of a possible wind farm. Gathered responses from consultees are used by Marine Scotland to provide advice and guidance for the developers to be addressed in further assessments. Thus, the concerns of consultees specify the issues that need to be addressed and eliminated if the proposal should go ahead.

### **10.3 Theoretical re-interpretation and policy recommendations**

As this research is predominantly based on two single case studies, while only very occasionally referring to other case studies, it cannot make the claim of generalising its results. Yet, due to the different international settings and the intended scope of

the research of comparing the two case studies, certain conclusions can be drawn and re-interpreted towards future recommendations for better practice. In order to do so, a number of implications for policy-makers will be deduced from the research outcomes. The objective is not to advise authorities and developers on how to overcome and counteract opposition, but to give brief suggestions on how to revise and amend planning procedures to achieve a more beneficial process for all actors involved.

### ***Determining affectedness in the first place***

A valuable starting point for dealing with conflicts is to determine which actors are affected by a proposed development. The assessment of affectedness should not be limited to overlapping land uses at the wind farm site, as it is usually undertaken with regard to the designation of priority areas. Situated affectedness should be understood in terms of any interests related to the wind farm projects and surrounding or adjacent ‘spaces’ and ‘places’. The identification of affected actors provides a reasonable and important step to define the ‘participatory catchment area’ and the scale of the planning process. The demarcation of stakeholders in the participation process should be accomplished by means of a “transactional space” (BARNETT & BRIDGE 2013) based on situational and problem-related principles rather than on territorial and administrative boundaries. Therefore, the suggestion is to integrate the determination of affectedness at an early stage in order to define potential actors who should participate in later planning phases and to coordinate later participatory methods.<sup>85</sup> A more centralised and general consultation process at early planning stages can be useful to compare general sentiments towards different projects and sites, and, more important, to capture broad interests in the projects to determine stakeholders. Subsequent steps involving all affected stakeholders, from experts over authorities to members of the public, can be more deliberative and collaborative in finding solutions as to how a project can be advanced, modified or cancelled. The determination of affectedness of certain actors should already be considered during the designation of priority areas in order to facilitate the process at the project level.

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<sup>85</sup> In a strict sense, that would imply that anyone could be a stakeholder who has an interest in a development even though one lives far away from the actual site. This has been reflected in the consultation on the draft plan for offshore wind farms in Scottish Territorial waters which attracted responses not only from the immediate vicinity of proposed sites, but also from visitors and people who are familiar with these places.



### ***Work beyond solely techno-centric assessments***

Although considering environmental impacts of wind farms is a crucial component of achieving broad acceptance of an offshore development, it is not the only component of establishing a legitimate decision. Indirect onshore effects of offshore wind farms are key concerns for a wide range of stakeholders. Public concerns are rarely limited to immediate adverse impacts and often include far-reaching societal effects of large infrastructure projects. This goes hand in hand with the previously stated change of perspective. It is not just the wind farm *per se* that is contested; it is about its wider place-transforming effects that should be taken into account to the same extent as any other technical and environmental impacts. In this regard, it will be crucial to assess the symbolic interpretations of the spatial conditions and the attachments to places in terms of everyday practices to understand the scope of change. The question is how to include those subjective and manifold opinions in planning. Moving beyond the pure visual change of the landscape can shed more light on underlying rationales. Even if the visual disruption of the landscape, that culminated in catchy phrases, such as defacing, damaging and spoiling the scenery, is a very common problem related to wind farms, it is only a symptom of more profound disputes over change. The siting of a huge offshore wind farm includes more pervasive fears than a mere change of the landscape. Therefore, questions should be asked in planning about what effects and further changes this visual alteration of the scenery may entail and who is affected by those changes. Enquiries should be made into the likelihoods and manifestations of specific repercussions of visual and physical changes. Assessments should contain investigations into likely and definite case-specific consequences of offshore wind farms that render actors affected. Those questions should obtain the same status as technical and environmental questions. However, this necessitates case-specific assessments instead of meta-studies that rely on the collation of unspecific information. The process of energy transition must not overlook its societal consequences, even if they are only localised.

### ***Dialogue is key - pushing public participation to the next level***

A better understanding and knowledge of objectors' motivations for resistance should be the first step in bringing offshore wind farms forward in a legitimate way. This requires a detailed engagement with all affected stakeholders. A profound engagement with involved actors can only be achieved through a dialogue process. A dialogue as a two-sided and mutually informing process should not just include

experts and expert knowledge, but also consider the alleged lay knowledge of the affected members of the public. In contrast to such an approach, the planning process in Germany has tended to dismiss and sideline the alleged lay knowledge by underscoring the value of contributions of experts, which constrained the power and influence of the wider public. Goal-directed communication and dialogue to capture views of the affected public and third parties does not just help to achieve a consensual planning but also to reach a democratically legitimised outcome. This does not necessarily end up with radical democratic procedures which bring about a public decision. But granting affected members of the public more influence in the planning process by making them participate during all relevant project stages may entail benefits for all actors, may lead to a more efficient process and may avoid large-scale resistance. More influence on the planning process would go beyond a pure dialogue and reciprocal exchange of information and would involve an active role of representatives from the public in co-shaping the planning process. Thus, informing and consulting the public should rather be the very first step of the process of assessing and understanding their opinions, motivations and potential affectedness, rather than the only way of engaging with them.<sup>86</sup> A collaborative approach, as exercised for the Argyll Array, also comprises questions about the kind of facts and information local people want to have in order to make the process more transparent for them and to address or rule out concerns. Despite the extensive consultations and the collaborative approach in Scotland, there still have been a lot of protests in all Scottish case studies. So, a broad consultation process itself does not provide any guarantee to reduce protests, and more consultations may still not address all issues and concerns, even if they may deliver sounder decisions. Developers and statutory institutions should also convince the public that they care about the local context, and adopt a more locally embedded planning approach (DEVINE-WRIGHT 2005a), such as partnerships with affected communities or community trusts. Furthermore, the affected public could be included in the designation of wind farms sites in first place. A more fruitful local planning process could be achieved by working towards the integration of place identity (HAGUE 2005, SMITH 2005, DEVINE-WRIGHT 2013b) into the negotiation of conflicts, as this appears to be crucial in informing opposition attitudes.

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<sup>86</sup> Earlier consultation of the public could have mitigated conflicts at later planning stages. The designation of potential areas for both Baltic 1 and Argyll Array was undertaken by the authorities and developers, excluding the public. Consulting the public in the designation process could have resulted in more mutually acceptable sites, instead of confronting the public and coastal communities with already selected sites which tend to be defended in the subsequent planning process.

### ***Bringing climate change and energy security back onto the agenda***

As both case studies have shown the global dimension of climate change and the wider purpose of wind farms are missing or silenced during the planning at the local level. When it comes to the re-embedding of the global climate discourse in terms of siting its material artefacts in form of wind turbines the actual purpose of wind turbines falls short in the debates. The discourse that is anchored in policies is the one of ecological modernisation, which combines the transition of the energy sector and benefits from effects on economic growth. Stressing the economic benefits of energy transition, such as the creation of jobs in the manufacturing sector, helps to substantiate the hegemonic discourse and may help to declare energy transitions as a national priority, but undermines the role of climate change and delegitimises oppositional tendencies. Economic growth and the creation of jobs are often perceived as knockout arguments which question the rightfulness of any oppositional motives. Although stressing the role of wind turbines to tackle climate change could easily be misinterpreted as the same strategy to challenge opposition morally, bringing climate change back on the agenda could nevertheless be helpful for making a well-balanced decision. The contributions of large-scale offshore wind farms to tackle climate change and reduce carbon emissions could be weighed against its environmental impacts in order to justify particular unavoidable impacts or compensation measures.

Similar to the absent narratives of climate change, the primary purpose of wind turbines to produce 'green' energy seems to fall short, too. The capacity of both wind farms may have occasionally been compared to the energy supply for a certain number of households, but the larger issue of energy security appears to be undervalued. A better and clearer integration of the local scale into larger debates about energy demand and security as well as the emphasis on the increased significance of the local level to accommodate energy production may facilitate the conditions for negotiation and planning. When climate change and energy security are underappreciated wind farms may appear as being planned and sited just for their own sake, with the adverse undertones prevailing and the actual purposes falling into oblivion.

### ***Dealing with uncertainty and planning with a lack of knowledge***

A very obvious, but intricate problem is the manifold uncertainty that pervades and determines all conflicts over offshore wind farms. Uncertainty pervades and complicates the planning process and manifests either in unknown facts and details about the proposed wind farm or as epistemic uncertainty about risks in terms of unknown effects and impacts of wind farms that may only become apparent during or after their construction.

In practical terms, the question is how risks and uncertainties can be addressed in planning to create a mutually convenient outcome instead of polarising claims and refusals. A quite simple starting point could be asking stakeholders who feel affected by uncertain effects what kind of information and facts about the project they want to have. A problem might occur if important data, such as the array, size and number of turbines, are not yet made available by the developers, which requires a larger flexibility of the planning procedures. In order to avoid lasting uncertainties it is important to specify basic elements and benchmarks of a development at an early stage. This provides more planning security for authorities and more information for affected stakeholders and may help develop mitigation measures for expected impacts. Another way to address uncertainty is to incorporate argumentative patterns and storylines of opponents into an equal and deliberative planning process in order to discuss the nature of their arguments instead of repulsing them, which the public hearing for Baltic 1 tended to do. This can serve to scrutinise the reasoning of their concerns by either alleviating them argumentatively or using them to inform the ultimate decision and the appearance of the wind farm. A reciprocal flow of information between stakeholders and decision-makers is a crucial way to address uncertainty within planning, to obtain and advance knowledge and to establish mutual understanding of all practices.<sup>87</sup>

However, there is still an epistemic uncertainty in terms of a lack of knowledge about potential impacts and further indirect effects. While extended assessments and studies may bring more security about particular phenomena, further knowledge can still be challenged on grounds of inappropriate ways of knowledge construction, unreliable references or omitted contextual information, as reflected in the tourism conflict. Therefore, a more adequate way to deal with epistemic uncertainty seems to

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<sup>87</sup> However, such an approach is certainly idealistic and its implementation may entail more costs and time.

be its characterisation, instead of attempting to overcome or reduce it. Characterising uncertainty that might not easily be reducible because of unknown underlying processes and effects could include risk assessments through which risks of particular actions are evaluated. Possible effects could be assessed and measures could be prepared to cope with the effects in case they eventuate. This has been reflected in the disputes over ship accidents, in which objectors against Baltic 1 were not as much interested in the likelihood of accidents as in the measures to be taken in case of an accident. Finally, a modified perspective from impacts to the vulnerability of environmental and social settings can give some indication of possible ramifications of wind farms and can contribute to a better comprehension of impacts. Taking vulnerability as a starting point can help to assess the repercussions of effects and the susceptibility of communities to potential impacts.

Since key concerns of local residents refer to potential changes of their everyday practices, uncertainty could also be addressed from a different angle. Compensatory measures could be oriented towards the maintenance of space-related practices, such as the expansion of tourism services or new marketing strategies. Efforts to maintain and fortify the everyday practices that establish the ties between actors and places could help to negotiate concerns of local actors, despite the feared changes engendered by the siting of wind turbines.

#### **10.4 Limitations and further research**

This research does not assert the claim of completeness. There are some limitations and open questions the research was not able to or did not intend to address, which will be outlined in this section.

Firstly, there are a few aspects that have been briefly touched upon but not fully elaborated. This is due to the fact that this study followed a qualitative approach through which the focal points and thematic orientation of the chapters were co-shaped by recurring narratives embedded in the data sets. So, the notion of power has only been implicitly addressed. A stronger focus on and investigations of power relations that pervade and shape conflicts over offshore wind farms could provide systematic knowledge about the course and dynamics of conflicts over renewables as well as about the role of particular actors and their capacity to influence the planning process. Another feature that has only been described rather than analysed refers to the actual practices of actors. A meticulous processual deconstruction of conflictual

practices from motivations to consequences of actions, as proposed by WERLEN (1997), could lead to a more coherent incorporation of and reflection on the different constitutive levels of space-related practices in conflict contexts, rather than a more descriptive approach to conflicting practices. Also looking explicitly at the construction of aesthetics of wind farms could have the potential to amplify the link between people, wind farms and locations. A more explicit focus on environmental justice could have been useful for the consideration of questions of how justice in relation to the siting of wind farm is constructed and how a just location of wind farms may look like. Turning the research focus towards place identity and place attachment again could reveal how bonds with socially constructed places inform particular conflicts and could eventually deduce ways of how those concepts may be included and addressed in the planning process through various opportunities of participation. Finally, it has been repeatedly emphasised that community involvement is important for a sound and legitimate planning process of offshore wind farms, but this research could have elaborated more on how good practices of community engagement for offshore wind farm planning may look like.

Secondly, other research foci and methodological approaches may have acquired different data sets and may have resulted in additional information which could have enriched this research. Findings are always strongly related to the data available and the methods applied to gather information. The strong focus on interview data and the large number of documents was useful to present and reflect upon conflicts as they are constructed and witnessed by key stakeholders, but have certainly obstructed different information that could not be acquired through these methods. Information that is unarticulated through the social one-off encounters of interviews, the creation of written representations and the transient posting on websites remained hidden and inaccessible. Inquiring into information that lies beyond the interview encounters would have required a different research perspective, which might have neglected other issues, such as the consideration of conflicts within the planning and licensing process that was obtained through expert interviews. More detailed knowledge about various conflicts could have also been obtained through a larger number or repeated interviews with local residents. But the basic goal was to identify conflicts over the siting of offshore wind farms, their underlying motivations and their consideration in the planning process rather than a more quantitative assessment of argumentative patterns of stakeholders. A thick description of the everyday experiences and perceptions of particular uncertainties emanating from the wind farm proposals could

have provided detailed knowledge about the everyday manifestations of conflicts, about opposing practices and about how people cope with uncertainty. In particular, this comprises more nuanced information concerning everyday power struggles and conflict-related practices. Such questions could have been addressed by coherent ethnographic methods. However, such an approach would have only been feasible for the Scottish *in itinere* case study. With regard to the German case study, broad ethnographic approaches could be used to examine the significance and constructions of the Baltic 1 wind farm in the everyday life of local residents. This could have also been useful with regard to the experiences and perception of tourists in order to validate the ambiguous claims made during the planning process of the wind farm. Additional studies could address the question how tourists and visitors perceive the Baltic 1 wind farm in order to verify or refute the opposing storyline which says that tourists do not agree to a wind farm in an area they visit for recreational purposes.

But there are more questions resulting from this research which could also be addressed in future studies. Future research could compare conflicts that emerge from other marine renewables such as wave and tidal schemes and offshore wind farms. This could clarify to what extent conflicts revolve around the actual facilities or the ‘spaces’ in which they are proposed and to what extent conflicts over offshore wind farms are shaped by visual appearance of the wind turbines, as other marine renewables were often mentioned to be less intrusive. Similarly, subsequent studies may also compare conflicts over wind farms in the Exclusive Economic Zone and Territorial Waters in order to determine how distance and proximity really matters to different stakeholders. All this could help to carve out and define more particularities of offshore wind farm siting controversies. As already mentioned, more comparative details on planning practices and public engagement strategies between wind farm proposals in Scotland, in particular from the ones planned off the more industrialised east coast, could further contribute to the comprehension of the origins and manifestations of particular conflicts.

Even though most of the outlined suggestions remain rather indicative, it should be obvious that only further research on offshore wind farm controversies will result in a deeper and growing comprehension of the complexities and realities of wind farm conflicts.

## 10.5 Final comments

The central objective of this research was to shed light on the types, origins, formations and negotiations of conflicts that emerge from the siting of offshore wind farms at the local level. The thesis has drawn on two international case studies, which provided a valuable basis for comparing the conflict dynamics, including their constitutive factors and manifestations and consideration in the regulatory framework. The focus on diverging and clashing space-related interests as underlying elements have led to the key outcome which comprises a change of perspectives from conflicts over offshore wind farms to conflicts over contested places and spaces. A crucial result of this research argues that not the wind farms *per se* are at stake, but their various space-transforming effects. Moreover, it could be shown that the contestation of offshore wind farms and the reference to slogans such as the disfigurement of landscape or industrialisation of nature, are only the symptoms of more profound conflicts over change. This shift of perspectives hopes to encourage and enrich further research on wind farm controversies to critically reflect on assumptions that are taken for granted, in particular the determinist role and significance of spatial conditions and the subliminal resumption of NIMBY portrayals. It is suggested that situated affectedness of actors could provide a fruitful starting point for critically assessing the ‘real’ motives and stimuli of resistance. It will not be enough to strive for approaches to simply overcome resistance in order to achieve a more effective siting rate for renewables. Conflicts, resistance and opposition have to be understood in a way that is beneficial for all involved stakeholders and that illuminates individual, spatial and structural aspects. This applies to research practices as well as to real-life practices of policy-makers. What remains is a need for a more thorough and critical reflection on existing planning instruments and the way planning regimes structure and constrain the power relations between different actors.

The realities of offshore wind power planning as they are experienced by involved actors have strikingly shown that policy-makers do not just face the political and economic problems of energy transition at the national level, but that they also have to take fully note of the mechanism and approaches applied to the local implementation of energy transitions.





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## **Appendices**

### **Appendix I: Consulted documents**

#### ***Policy papers, reports and websites***

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MECKLENBURG-VORPOMMERN (2003): Minutes of the plenary discussion of the Federal Government Mecklenburg-Vorpommern on offshore infrastructures September, 2003

## **Appendix II: Publications from research**

### ***Conference Posters:***

Rudolph, D.: Space-related conflicts over offshore wind farms. *6<sup>th</sup> PhD Seminar on Wind Energy in Europe, Norwegian University of Science and Technology, Trondheim, Norway 30<sup>th</sup> September 2010.*

Rudolph, D.: Contested Seascapes- Space-related conflicts over offshore wind farms. *GeoSciences Postgraduate Conference, University of Edinburgh, 23<sup>rd</sup>-24<sup>th</sup> March 2011.*

Rudolph, D.: Space-related conflicts over offshore wind farms. *Global Environment and Society Academy, Inaugural Research Event, University of Edinburgh, 5<sup>th</sup> November 2012.*

### ***Conference Papers:***

Rudolph, D.: Tourism and Uncertainties in space-related conflicts over offshore wind farms. *RGS-IBG Annual International Conference 2012, Edinburgh, 5<sup>th</sup> July 2012.*

Rudolph, D.: Leaving NIMBYs behind. Uncertainty within space-related conflicts over offshore wind farms. *32<sup>nd</sup> International Geographical Congress. Cologne, 30<sup>th</sup> August 2012.*

Rudolph, D.: Contested places of energy production. Coastal communities and offshore wind farms in Scotland and Germany (in German). *Annual Meeting of German Energy Geographies Working Group, Humboldt University Berlin, 20<sup>th</sup> April, 2013.*

Rudolph, D.: Contested Seascapes: Space-related conflicts over offshore wind farms. *German Geographers Day, Passau, 5<sup>th</sup> October 2013.*

### ***Journal articles:***

Rudolph, D.: *The resurgent conflict between offshore wind farms and tourism: Underlying storylines.* (under review, Scottish Geographical Journal; to be considered for special issue on Geography, Communities and Renewable Energy Insecurity, organised by K. Graham & D. Rudolph)

Rudolph, D.: *Leaving NIMBYs behind: The role of affectedness in conflicts over offshore wind farms.* (in preparation)

## Appendix III: Consent Form



THE UNIVERSITY *of* EDINBURGH

### CONSENT FORM

I ....., hereby agree to participate in the PhD study to be undertaken by **David Rudolph** and I understand that the purpose of the research is to explore conflicts that emerge from Offshore Wind Farms in Scotland.

I understand that:

1. My personal details will be kept confidential and my identity will be anonymised.
2. Any information that I provide will not be made public in any form that could reveal my identity (without my consent).
3. Anonymised interview extracts may be used in the researcher's thesis and in academic journals.
4. I am free to withdraw my consent at any time during the study.

I agree that the interview will be recorded for the purpose of the research only.

I do not agree that the interview will be recorded.

Signature: .....

Signature of the Interviewer: .....

**Contact Details of the Researcher:**

David Rudolph, 1.07. (Harris Suite) | Institute of Geography | University of Edinburgh | Drummond Street, Edinburgh, EH8 9XP, Scotland, UK | d.p.rudolph@sms.ed.ac.uk

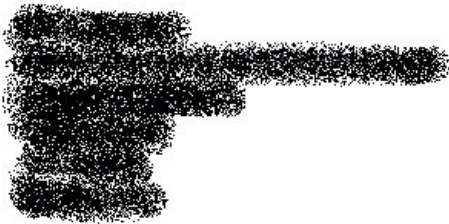
## Appendix IV: Letter – Interview Request

DAVID RUDOLPH

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20<sup>th</sup> November 2010



### Interview request for doctoral research

Dear [REDACTED]

I am currently conducting PhD research in the School of GeoSciences at the University of Edinburgh. My research project is entitled “Contested seascapes – space-related conflicts over offshore wind farms”, and deals with divergent views about the context of the transition to renewable energy in Scotland and Germany. Essentially, the research project is exploring the conflicts surrounding the development of offshore wind farms and how and to what extent those are dealt with in the course of planning and decision-making.

By means of expert interviews I hope to gain detailed knowledge about the perceptions, interests, actions and strategies of involved stakeholders as well as their influence on the discussions and the development of planned offshore wind farms off the county of Argyll. A leaflet with more details of my research is attached.

Due to your expert knowledge and background as [REDACTED] [REDACTED] I would be very grateful if it were possible to come and speak to you about your views. I am very interested to find out more about the perspective of [REDACTED] on offshore wind farms and this proposal, preferably in the period of Jan. 24<sup>th</sup> – Feb. 25<sup>th</sup> 2011. Such information will be of major importance for my work.

Thank you for considering my request. If you have any further queries, please do not hesitate to contact me (preferably via email). I am looking forward to hearing from you.

Yours sincerely,  
David Rudolph

## Appendix V: Leaflet of Information

### RESEARCH PROJECT ON CONFLICTS OVER OFFSHORE WIND FARMES

#### WHAT IS THE RESEARCH ABOUT ?

Within my PhD project I comparatively investigate spatial conflicts surrounded by the growing implementation of offshore wind farms in Scotland and Germany.

I am generally interested in the context of the formation of conflicts within different policy frameworks. New perspectives on barriers to the success of renewable energy can be gained by drawing on conflicting interests of different stakeholders at various policy levels that are directed to the offshore area.

In detail, the research interest focuses on the exploration of stakeholders involved in specific offshore wind energy disputes as well as on the ones being affected by offshore wind farms and on the background of their attitudes and interests. In addition to this, another objective focuses on information about their possibilities and action strategies to enforce goals in the course of the planning and decision-making process.

In this context, I will examine how the offshore area is seen by different stakeholders and which meanings are attributed to this space as well as to what extent environmental issues are referred to.

The overall research question is about how these aspects shape diverse conflict situations and how these may be alleviated.

#### YOUR PARTICIPATION

In order to fulfil this study it is necessary to interview various stakeholders about their different attitudes, perceptions and interests regarding offshore wind facilities.

You have been chosen because you are someone involved in or affected by current establishment of offshore wind turbines, and thus being an expert who may be able to contribute knowledge and experiences to the described research project.

Your participation in the interview will help to illuminate circumstances, conditions and concerns about planned offshore wind farms. First-hand information will be indispensable to the fulfilment of the outlined intentions of the research.

But this also means that you will be given the opportunity to address issues and concerns that might be significant for you and reflect your interests and valuations.

Your voluntary and anonymous participation is very much appreciated and will essentially contribute to the completion and success of the study.

Upon completion there will certainly be the chance for you to be provided with results of the project.

#### GOALS & INTENDED OUTCOME

This research is valuable as it anticipates to make an urgently needed, scientific and practical, contribution to contemporary issues of energy security and climate change by focusing on potential obstacles to renewable energy facilities.

Theoretically, the goal is to help widening the comprehension of the interaction between society and environment. Practically, by revealing conflicts and related causes this work attempts to point out directions to overcome contentions of renewable energy facilities and thus enhancements regarding viable policy, planning and decision-making processes can be derived.

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## **Appendix VI: Interview Guide, Sample**

### ***Role of SNH***

What are your tasks in the SNH on Islay?

Are there any differences between the local branches and the main department of the SNH in terms of activities, goals and tasks?

What do conservation, sustainability and heritage mean regarding the marine and coastal areas of Scotland?

What role does the offshore space play concerning the goals of the SNH?

What meaning does the seascape have for the SNH?

Does the SNH collaborate with other stakeholders such as the Islay Energy Trust, the community council, the government and the developer of the wind farm?

### ***SNH and offshore wind farms***

What are the attitudes of the SNH towards offshore wind farms?

What are your tasks and interests regarding the planned Islay offshore wind farm?

How do you / does the SNH pursue these interests?

### ***Conflicts***

What do you think are the concrete conflicts that may emerge from the offshore wind farm off the coasts of Islay and Tiree?

What do you think are possible (environmental) impacts on the island and the offshore area?

Are there any potential overlaps in the different uses of the offshore space?

Do you see any conflicts or an overlapping of interests between the offshore wind farms and the protection of nature?

Can global climate protection and regional protection of nature be reconciled by means of offshore wind farms?

How does the SNH mediate between such interests?

### ***Planning and Policy Framework***

What do you think are the main issues that need to be considered when proceeding with the wind farm plan?

Do you think the current policy framework and guidelines are appropriate? Is there a need for improvements or amendments of the designation and planning of offshore wind farms?

Are there any further steps planned with regard to the Islay and Argyll Array offshore wind farm proposals?

